DOCUMENT RESUME

ED 128 084 PS 008 762

AUTHOR	Camp, Janet; And Others
TITLE	Transportation: Unit Manual Ten. Curriculum Guide.
INSTITUTION	George Peabody Coll. for Teachers, Nashville, Tenn. Demonstration and Research Center for Early Education.
SPONS AGENCY	National Institutes of Health (DHEW), Bethesda, Md. Bureau of Health Professions Education and Manpower Training.; Office of Economic Opportunity, Washington, D.C.; Office of Education (DHEW), Washington, D.C.
PUB DATE	72
CONTRACT	NPECP-70-00
GRANT	OEO-CG-9995
NOTE	83p.; For other manuals in this series, see PS 008 758-63
AVAILABLE FROM	CEMREL, 3120 59th Street, St. Louis, Missouri 63139 (Paper, $2.50)
EDRS PRICE	MF-$0.83 HC-$4.67 Plus Postage.
DESCRIPTORS	*Basic Skills; *Cognitive Development; Concept Teaching; *Curriculum Guides; *Early Childhood Education; *Instructional Materials; Learning Activities; Perceptual Motor Learning; Resource Guides; Skill Development; Social Studies Units; Teaching Techniques; Thought Processes; *Transportation
IDENTIFIERS	*DARCEE

ABSTRACT

This is number 10 in a series of resource manuals consisting of 11 sequenced curriculum guides developed by the Demonstration and Research Center for Early Education (DARCEE) for use in early childhood education programs. Emphasis is placed on the development of sensory, abstracting and mediating, and response skills. The projected order of the units is: (1) All About Me, (2) Plants, (3) Autumn, (4) Home and Family, (5) Winter, (6) Forest Animals, (7) Neighborhood and Community, (8) Farm Animals, (9) Spring, (10) Transportation, (11) Farm Crops. Each unit is intended to build upon skills developed in the preceding ones. The tenth unit, "Transportation," is primarily a social studies unit. The major content objectives are to develop the child's awareness and understanding of the various ways of transporting people and goods and the particular characteristics and uses of different vehicles. The suggested time for the unit is two to three weeks. Instructional activities are presented side by side with basic skills to be developed, and space is provided for teachers to outline additional activities and skills. The appendix includes patterns for teacher-made materials. (MS)

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TRANSPORTATION

Unit 10

by

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John F. Kennedy Center for Research on Education and Human Development
George Peabody College for Teachers
1972

Acknowledgements

A manual such as this requires the cooperation of many people. We are grateful to the teachers, children, and parents with whom we worked.

Special thanks go to Cynthia C. Williams for art work, and to Martha Lisle for proofreading and typing.

The work represented in this manual was funded in part by Office of Economic Opportunity Grant CG 9995 and Office of Education Contract No. NPECE-70-006. Contractors undertaking such projects under government sponsorship are encouraged to express freely their professional judgment of the conduct of the product. Points of view or opinions stated do not, therefore, represent the official policy of either office.

The work represented in this publication was additionally funded by Bio-Medical Sciences Support Grant FR-5 S05 RR07087-06 from the general support grant, Division of Research Resources, Bureau of Health Professions, Education and Manpower Training, National Institute of Health.

FOREWORD

The Use of DARCEE Resource Unit Manuals

The series of resource unit manuals consists of 11 curriculum guides. Each unit builds upon preceding units, moving the child to higher levels of development and understanding. The projected order of the sequence of units is as follows:

1) All About Me
2) Plants
3) Autumn
4) Home and Family
5) Winter
6) Forest Animals
7) Neighborhood and Community
8) Farm Animals
9) Spring
10) Transportation
11) Farm Crops

Although it is not suggested that the units be individually followed as "recipe books," it should be restated that each unit builds upon skills developed in preceding ones. Thus, beginning with activities in Unit 10 would present problems for the children if they have had no opportunities to develop and refine the skills presented in preceding units. Another reason for "beginning at the beginning" is the development of the teacher. The first five units are written in a great deal of detail to be very supportive of the teacher and give her a number of illustrations of skill development activities. As she becomes more confident and creative in designing her own activities and materials, the text becomes less descriptive and detailed. Units 6, 7, and 8 present more opportunities for the teacher's original ideas. The final three units are planned as "skeletal" guides indicating skills and concepts, a few suggested activities and a publications list. They leave a lot to the discretion, imagination, and abilities of the individual teacher.

Each unit begins with an introduction stating the specific goals and objectives of that unit. A certain number of weeks for covering the material is suggested. These <u>are suggestions</u>, however, and should not be interpreted as "law." The most appropriate way for a teacher to use the units is in the way that will be most valuable to her and her particular group of students. Adjustments may need to be made on the basis of geographic location, the range of the children's experiences and the amount of time required to cover the desired material. The teacher may decide to substitute some of her own activities. She may like some units better than others; prefer some sections over others. She should feel free and comfortable in making these adjustments.

Should the teacher decide to follow the units rather closely at first, she should do so bearing in mind that the subject matter they cover was meant to be only a part of a full day's activity. Three solid weeks of any one unit, all day, everyday, could be a disaster as far as maintaining interest, attentiveness, and motivational level. It would also be advisable to skip a day of unit related activity occasionally for the same reason.

The basic layout of the resource units runs approximately according to the following pattern:

1) Introduction
2) Concepts and Understandings
3) Skills
4) Sequenced Instructional Guide
5) List of Suggested Materials
6) Appendix

DARCEE Curriculum--An Information Processing Model

I. SENSORY SKILLS--"Input" Receiving information

Orienting and Attentional
- Visual
- Auditory
- Tactile-Kinesthetic
- Taste-Olfactory

Discriminatory
- Visual
- Auditory
- Tactile-Kinesthetic
- Taste-Olfactory

Relational
- Visual
- Auditory

Sequential
- Visual
- Auditory

II. ABSTRACTING AND MEDIATING SKILLS--"Organization" Organizing information

Basic Concept Development

color	length	speed
shape	volume	taste
size	(aud.)	flavor
number	texture	& odors
position	weight	time
volume	temperature	age
pitch	motion	affect

Association
1. Objects with objects--functionally, spatially, temporally
2. Labels with objects, sounds, actions, concepts
3. Labels with labels

Classification
1. Deductive classification
2. Inductive classification

Sequencing
1. Motor--sequencing series of actions, directions, events
2. Verbal--sequencing a series of concepts, events

Critical Thinking
1. Drawing relationships
2. Making inferences
3. Making predictions
4. Analyzing problem situations
5. Synthesizing ideas
6. Hypothesizing
7. Evaluating
8. Drawing analogies
9. Analyzing absurdities

III. RESPONSE SKILLS--"Output" Expressing information

A. Verbal
- Fluency
- Articulation
- Syntax
  - a. Single-word level--identification of objects, actions, sounds, concepts
  - b. Phrase level
  - c. Complete sentence level
    - simple declaratives
    - interrogatives
    - negatives
    - "and" statements
    - "or" statements
    - "if-then" statements
    - "I don't know" statements
    - complex sentences--adverbial clauses

B. Motor

Small-Motor Coordination (eye-hand coordination)

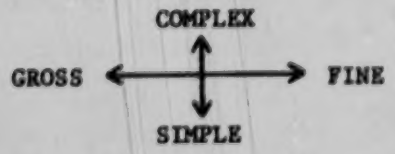
pasting	cutting
modeling	lacing & weaving
painting	tracing
coloring	solving mazes
stringing	following dots
drawing	printing

Orientation
- left-to-right progression
- top-to-bottom progression
- front-to-back progression

Basic Skill Development

The Information Processing Model provides a framework for an emphasis on basic skills to be extended and developed through the activities of each unit understanding. The primary purpose of the unit content is to motivate and encourage children to use basic skills. Mastery of unit content, then, is secondary to the development of basic skills. Instructional activities utilize materials and experiences of interest to most young children, thereby providing children with many opportunities for developing SENSORY, ABSTRACTING, and RESPONSE SKILLS--those skills necessary to receive information, to organize information, and to respond to, or use, information in a meaningful way. These are the skills necessary for cognitive growth and the development of intellectual competency. Mastery of the basic skills will make it more possible for children to impose order and structure upon the environment in which they find themselves.

While the DARCEE Curriculum diagram has categorized specific skills under the headings of Sensory, Abstracting, and Response Skills, it is important to note that in reality there is no such clear-cut separation. The diagram is a conceptualization of a process and, as such, is a representation of a way to organize basic skills in order to think about them in relation to curriculum development. It does not imply that at any time a child would be expected to use one skill only. For example, even though an activity may emphasize the development of color concepts (abstracting skills), the child is using, at the same time, his sensory skills (receiving information) and perhaps also his response skills (expressing information about color). The categorization of basic skills is simply intended to point out the emphasis of a particular activity while assuming that in any endeavor the child is actually using a variety of skills to reach a particular outcome.



Development of Sensory Skills

Sensory skills refer to those skills which involve the senses of seeing, hearing, tasting, smelling, feeling, and touching. They are basic to all skill development because all that is learned is received through one, or a combination of more than one, of these senses. A child sees that two cubes are alike because he sees they are the same color. A child hears that two sounds are different because one is loud and one is soft. A child feels that a pin is sharp because it sticks him. Generally speaking, however, simply receiving information through the senses does not require the child to think about the information. The child can see that two cubes are alike, or hear that two sounds are different without knowing, or thinking about, the name of the color of the cube or saying that one sound is loud and one is soft. The child can sense the pain of the pin prick without knowing the words sharp or pin.

When activities that emphasize sensory skill development are presented, the child is expected to behave in a physical way rather than to respond verbally (with words, phrases, or sentences). It is certainly all right for the child to respond verbally for he is, in fact, letting you know that he is ready for the next level of skill development. What is important, though, is that the behavior usually expected when the emphasis is on sensory skill development is in terms of a physical rather than a verbal action.

Activities emphasizing the receiving of information through the senses represent the first level of skill development in the DARCEE Curriculum. A wide range of sensory experiences, with the teacher close by to label and describe, provides the foundation upon which the child builds more complex skills and understandings. The ability to take in information through all the senses is fundamental to the future learning of the child.

Development of Abstracting and Mediating Skills

Abstracting and mediating skills refer to those skills which make it possible to organize and store incoming information in such a way that it can be readily available for present and future use. The development of these skills helps the child pull out the most important factors to remember about a person, object, or event. Impressions received through the senses are soon lost unless the child has some way of organizing the key elements of information. New information becomes more meaningful when it can build upon what is already known. Being able to organize information requires the child to think about incoming information and to sort out what is most important about it.

The level of a child's language development is very closely related to the development of abstracting and mediating skills. In fact, the ability to associate labels with objects is a mediating skill; e.g., using the word round to associate balls, apples, oranges, circles. The child does not necessarily have to be able to speak the word at this point. He may have a much larger understanding vocabulary than he does a speaking vocabulary. It is often by his physical action, an observable behavior, that the child indicates he is able to organize information--to associate, classify, and sequence things in his environment. When the child has had many opportunities to experience round objects, he may be shown a ball and a cube and be asked to show which one is round. If indeed the child has in some way organized information about roundness, he will respond by pointing to, or picking up, the ball. He will respond in a similar way to the presentation of any round object whether or not he has knowledge of the particular object. For example, the child may never have seen a globe; but when shown a globe and a cube, he will be able to pick out the globe as something round.

Activities emphasizing the organization of information through abstracting and mediating skills represent a second level of skill development in the DARCEE Curriculum. According to the individual child's skill level, he may be expected to respond either non-verbally or verbally. The response the child uses is dependent upon the quantity and quality of his sensory experiences and his level of language development.

Development of Response Skills

Response skills refer to the ways in which the child is able to use or express the information he has organized. The responses may be verbal, moving from single words to complex sentences, or the responses may be physical actions; e.g., cutting, pasting, painting, etc. All unit activities call for either verbal or motor (physical) responses, or a combination of both, and are sequenced to help the child refine his skills of responding, moving from gross responses (single words, tearing paper) to fine responses (complex sentences, cutting on a line with scissors).

Levels of Skill Development

Discriminates: the ability to make some distinction of likeness and difference between people and objects. The child may point to something, pick it up, turn his head in the direction of it, etc.--a physical action indicating that through one of his senses he is aware of likeness and difference. Matching, the ability to place like objects together, requires the child to discriminate, such as, between a red cube next to another red cube and a red cube on top of a piece of paper. Neither discriminating nor matching requires a verbal response.

Recognizes: The child indicates by a physical action that he understands what is said to him. Recognition does not require a verbal response--the teacher supplies the label. A red, a yellow, and a blue cube are placed before the child. The teacher says, "Show me the yellow cube." The child recognizes the concept of yellow if he points to or picks up the yellow cube.

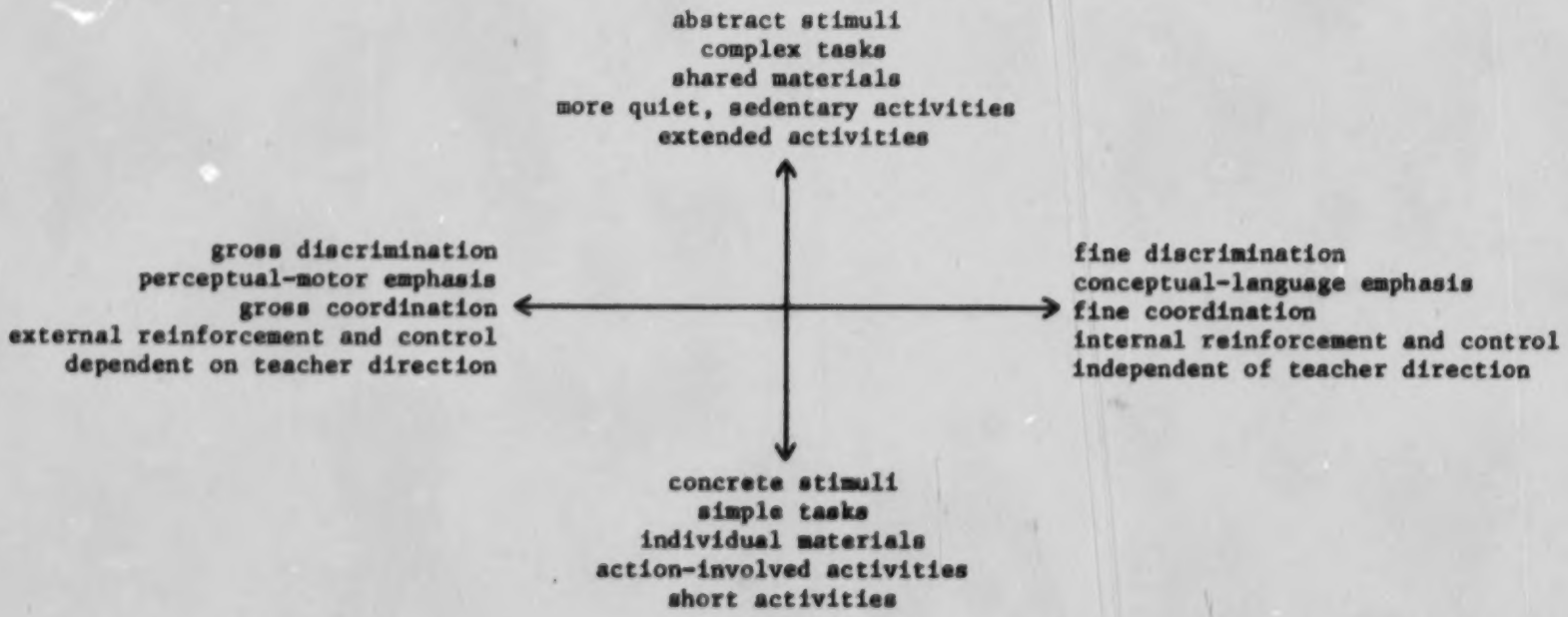
Identifies: The child is expected to give a verbal response--to supply a label for a given object. The teacher holds up the yellow cube and asks, "What color is this?" The child identifies when he responds with the word yellow.

Sequencing Within the Curriculum

Throughout the DARCEE Curriculum Guides, it will be noted that the expectations for the development of children follow a sequential order. The child must be able to discriminate and match objects before he is expected to recognize them. He must be able to recognize objects before he is expected to identify them.

discriminate
match → recognize → identify

Additionally, sequencing principles determine the order of the presentation of unit content and skill development activities. Unit content is developed in an order of increasing complexity and abstraction while, simultaneously, skill development is proceeding from simple, gross, sensory skills to complex and abstract response skills. Each unit builds upon the concepts and skills of preceding units, moving the child to higher levels of understanding and skill development. For example, the content of the first unit, All About Me, was about the child himself--a topic of obvious concern and interest to him. Succeeding units about people take the child away from himself into the Home and Family and then the Neighborhood. Proceeding through the units, instructional activities provide many opportunities for the skills of receiving, organizing, and expressing information to become increasingly refined and complex. Within each unit, the instructional activities are ordered to coincide with the continuing growth and development of more abstract and complex skills. In utilizing the principles of sequencing, the DARCEE Curriculum makes it possible to begin at the child's immediate level of development, and, by reviewing and extending previously learned concepts and skills, to introduce the child to higher levels of skill development in a manner appropriate for the individual child.



How to Use DARCEE Curriculum Guides 8, 9, 10, 11

For each experience described under Suggested Instructional Activities, there is a list of specific skills children will be developing through doing the activities. Specific basic skills are related to each activity in the following manner:

SKILLS TO BE DEVELOPED		SUGGESTED INSTRUCTIONAL ACTIVITIES
Visual		1. Give each child an envelope with cut-out body parts of a bear. Have the child paste the parts on manila paper to make a bear.
1.	Whole-part-whole relationship	
Concept Development		2. Read The Three Bears. Have the children recall the story content in sequence.
2.,3.	Recognizes and identifies size concepts (big, middle size, little)	3. Give the children a ditto of The Three Bears. Have them paste the appropriate size bowl, chair, and bed under each bear.
Association		
1.	Associates the animal with its characteristics	
Sequencing		
2.	Recalls the order of story content	
Verbal Response		
2.,3.	Uses single words and phrases Models complete sentences	
Motor Response		
1.,3.	Coordination	

Look at the column headed "Skills To Be Developed." Notice that there is a numeral beside each skill. This numeral corresponds to an activity in the column headed "Suggested Instructional Activities"; e.g., beside the skill "whole-part-whole relationship" is the numeral 1, indicating that this skill is emphasized in activity 1. By referring to the Curriculum diagram, you can then determine the category of the specific skill. This should make it possible to plan activities that meet the skill development needs of your particular group of children.

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I. Introduction

The tenth unit, Transportation, is primarily a social studies unit. It is intended to review and extend the concepts, understandings, and skills which the child has previously developed.

The major content objectives for the child are to develop his awareness and understanding of the various ways of transporting people and goods and the particular characteristics and uses of different vehicles. The major skill objectives for the child are to further develop and refine his Sensory Skills and to encourage the development of Abstracting, Mediating, and Response Skills--especially Verbal Response Skills.

Unlike earlier units, this unit is intended to be a "skeletal" guide for the teacher. Where possible, blank areas have been left for the teacher to write in her own activities and skills to be developed. By paying careful attention to sections II, III, and V, the teacher should be able to develop additional or alternative activities for each unit understanding.

It is expected, as with preceding units, that this unit will need to be adapted to a particular group of children and to a particular geographic area. The content of the unit understandings should be altered so as to be appropriate for the group of children and the area.

It is suggested that two to three weeks be devoted to this unit. You will need to adjust the length of time according to the interest, attention span, and skill level of your children. The unit understandings and basic skills are ordered from the most simple to the most complex so that the unit can be terminated at any point where the content or skill development becomes too complex or abstract for the children to grasp. Instructional materials, commercial or teacher-made, should be adapted for your particular group of children emphasizing concrete, first-hand experiences insofar as possible.

II. Concepts and Understandings

A. Transportation is the means by which people, animals, food, and other goods are carried from one place to another.

1. Most people, animals, and goods are transported by vehicles.

a. Vehicles are objects on wheels or runners which are designed to carry people and objects.

b. There are many different kinds of vehicles--car, truck, bus, train, airplane, bicycle, baby carriage, grocery cart, sled, wheelbarrow, dolly, wheelchair, go cart, motorcycle.

c. People who are transported in vehicles are called passengers.

2. People, animals, and goods are transported by land, by water, and by air.

a. Vehicles with wheels or runners are used for transportation by land.

b. Boats are used for transportation by water.

c. Airplanes, helicopters, and rockets are used for transportation by air.

d. People and animals are means of transportation on land or water.

e. Elevators, escalators, lifts, conveyor belts are means of transporting people and goods up and down for short distances.

B. Cars are a major means of land transportation for people.

1. Cars are alike in that they are designed with one to three rows of seats to carry people, and they have the same basic parts.

windows	seats	windshield wipers	lights
doors	steering wheel	seat belts	fenders
windshield	brakes	engine	tires
bumpers	instrument panel	battery	

2. Cars are different in many ways.

a. Cars differ by physical characteristics--color, size, shape, number of doors, number and shape of windows, accessories and/or special features.

b. Cars differ by type--sedan, station wagon, convertible, limousine, coupe, jeep, sand buggy.

c. Cars differ by function--family or passenger car, racing car, police car, fire chief car, taxi, ambulance, hearse.

d. Cars differ by age--new model cars are manufactured each year.

e. Cars differ by make--Ford, Chevrolet, Plymouth, Volkswagen, Cadillac, Oldsmobile, Pontiac, Buick, etc.--and by model.

3. Cars and other vehicles operate on streets, roads, and highways.

a. A huge network of roads--streets, highways, turnpikes, and interstates--connect houses, neighborhoods, towns, and cities all over our country.

b. Car drivers use road maps to aid them in reaching their destinations.

4. Car drivers and car owners must follow strict rules in order to drive cars.

a. Drivers must pass a test and receive a license in order to drive.

b. Drivers must obey traffic rules in order to keep themselves and others safe.

c. Traffic signs tell drivers what to do.

5. People pay money for the use of cars.

a. Most families buy their own cars. They use money to pay for the car, the car insurance, the gasoline from the service station, repairs and maintenance at a service garage.

b. Some people use taxi cabs and pay money for each trip they take.

C. Trucks are important vehicles for the transportation of animals and goods on land.

1. Trucks are alike in that they have the same basic parts and are all designed to carry goods.

2. Trucks, like cars, are different in many ways.

a. Trucks differ by physical characteristics--color, size, shape, number of wheels, number of sections.

b. Trucks differ by general type--pick-up, van, delivery, tank, trailer, dump.

c. Trucks differ by special function--firetruck, cement mixer, cattle truck, moving van, bread truck, mail truck, oil truck, milk truck, garbage truck, ice cream truck, coal truck, refrigerated truck, telephone truck, auto transport truck, vendor truck, market truck, wrecker or tow truck, bookmobile, etc.

d. Trucks differ by age.

e. Trucks differ by make.

3. Trucks, like cars, operate on streets, roads, and highways.

a. Many truck drivers are people who earn a living by driving trucks.

b. Many trucks travel long distances on highways.

c. In some places, there are special roads for trucks called truck routes.

d. Many highways have weighing stations to check the weight of goods carried by each truck.

4. Truck drivers and truck owners must follow special regulations in order to carry goods.

a. Drivers of most trucks must pass a special test and receive a special truck driver's license.

b. Truck drivers must obey all general traffic rules plus special rules just for trucks.

5. Different people own trucks.

a. Most trucks are owned by companies which use these vehicles to transport goods to and from their places of business.

b. Many farmers own small trucks to carry animals, milk, eggs, and crops to market and to carry seed, fertilizer, and feed to the farm.

c. Some families own a truck for family use or business use.

D. Buses are important vehicles for the transportation of groups of people on land.

1. All buses are alike in that they are designed with rows of seats to carry people, and with many windows for sight-seeing.

2. Buses are different in many ways.

   a. Buses differ by physical characteristics--color, size, number of wheels, presence or absence of a luggage compartment.

   b. Buses differ in type and function.

      (1) School buses, usually bright yellow or orange, carry children to and from school.

      (2) Local or city buses travel in urban areas, carrying people from one part of the city or town to another. These buses stop at designated places (bus stops). A passenger pulls a cord to ring a bell which lets the driver know to pull over at the next bus stop.

      (3) Cross-country or express buses transport people from town to town, city to city, and sometimes country to country. These buses carry baggage and mail.

      (4) Tour buses carry sight-seers or tourists to special places of interest.

   c. Buses differ by age.

3. Buses, like trucks and cars, operate on streets, roads, and highways.

   a. The person who operates the bus is called the bus driver.

      (1) Most bus drivers go to a special school to learn how to drive a bus.

      (2) Most bus drivers earn their living by driving buses.

   b. Buses have certain routes where they always travel.

   c. Bus drivers use maps of their routes to aid them in reaching their destinations.

   d. Buses are operated on time schedules--they arrive at and depart from specific places at specific times.

4. Bus drivers and bus owners must follow special regulations in order to transport people.

   a. A bus driver must pass a special test and receive a bus driver's license.

   b. Bus drivers must obey all general vehicle rules plus special rules just for buses.

   c. Buses must be inspected regularly to make sure they are safe to transport people.

5. In large towns and cities, transportation companies build special places for buses called bus terminals.

   a. A bus terminal is a large building where cross-country buses come to deliver passengers and to pick up new passengers.

   b. Sometimes buses are cleaned and repaired in a garage at the terminal or bus station.

   c. Sometimes buses are stored at the terminal.

   d. Passengers buy bus tickets from ticket agents at the terminal.

   e. A bus terminal usually has a restaurant and a small store where passengers can buy food and other goods.

   f. A terminal often employs people called red caps or porters who are paid to carry luggage for passengers.

6. Passengers pay money to ride on most buses.

   a. Most buses are owned by transportation companies which operate the buses as businesses.

   b. Passengers pay cash or buy tokens or tickets.

E. Trains are a very important means of land transportation for goods, animals, and people.

1. Trains are alike in that all have an engine, cars, and a caboose and all run on railroad tracks.

2. Trains are different in many ways.

   a. Trains differ in physical characteristics--colors of cars, lengths, types of cars.

b. Trains differ by function and location.

(1) Freight trains are the most common type of train. They are often very long and travel long distances carrying goods and animals.

(2) Passenger or commuter trains transport people and some baggage and mail.

(3) Trolleys operate on tracks in the streets of some cities. They carry only people.

(4) Subways operate on tracks under the ground in many cities.

(5) Monorails operate on only one track which is elevated over a city.

(6) Some trains transport families and their cars long distances.

c. Different trains have different types of cars, depending on the function of the train.

(1) The cattle or stock car carries live animals.

(2) The hopper car carries coal, gravel, or ore.

(3) The flat car carries machinery, logs, or boards.

(4) The tank car carries milk and liquid chemicals.

(5) The box car carries dry goods, barrels, boxes, and boats.

(6) The gondola carries machinery, pipes, and cement blocks.

(7) The auto car has three tiers and carries from nine to fifteen cars.

(8) The caboose contains an office, bedroom, and kitchen for the train crew.

(9) The pullman car or coach carries passengers.

(10) The dining car contains a dining room for passengers.

(11) The sleeping car contains beds or berths for passengers.

(12) The mail car carries mail.

d. Trains differ by type of power--locomotive (coal, steam), diesel (diesel fuel), electric (electricity).

3. There are different people who work on trains.

a. The train engineer and fireman sit up in front in the cab and take care of running the train.

b. The brakeman is located in the caboose.

c. The conductor is the "captain" of the train. He and the trainmen, pullman, and porters take care of the passengers and the crew.

d. The chef, cooks, waiters, and stewards work in the kitchen and dining cars where food for passengers is cooked and served.

4. The crewmen on a train must be trained for their jobs.

a. The people who work on the trains go to special schools to learn about their jobs.

b. The crewmen, especially the engineer, must know all the rules and signals for operating trains.

5. There are special places in towns and cities where trains stop to load and unload.

a. Freight trains load and unload at a freight yard.

b. Passenger trains load and unload at a train station.

(1) Train stations are like bus terminals in that they have restaurants and shops; ticket desks where passengers buy tickets from railroad agents; red caps or porters who carry luggage.

(2) At the station, the trains are cleaned and repaired or serviced.

c. Trains load and unload on time schedules--they arrive at and depart from specific places at specific times.

6. People pay money for the use of trains.

a. People and companies pay to have goods and animals transported by train.

b. Passengers must buy tickets to ride on trains.

F. Aircraft, such as airplanes, helicopters, and rockets, are means of transporting people, animals, and goods by air.

1. Airplanes are alike in that they are vehicles that can fly and they all have certain basic parts.

wings	fuselage	fuel tanks	cabin
nose	engine(s)	cockpit	seats
tail	landing gear	controls	tires/wheels

2. Airplanes are different in many ways.

a. Airplanes differ by physical characteristics--color, size, shape, number of engines, jets or propellers, accessories and/or special features.

b. Airplanes differ by type and function.

(1) Small airplanes, with only one to four seats and one engine, are owned and used by individuals for pleasure, recreation, personal transportation, crop-dusting, and photography.

(2) Some small airplanes, with four to 20 seats and two engines, are owned and used by businesses to transport people who work for them.

(3) Many medium-sized to large airplanes, with as many as 500 to 900 seats and two to eight engines, are owned by commercial airlines and used to carry travelers and their baggage and mail. These passenger planes are called airliners.

(4) Many large airplanes, called cargo planes, carry animals and goods.

(5) Many planes, of all sizes, are military planes--cargo and transport planes, bombers, fighters, reconnaissance planes.

c. Airplanes differ in how far and long they can travel.

(1) Most small planes travel only short distances before stopping.

(2) Large planes, with large fuel tanks, can fly many hours, covering thousands of miles.

d. Airplanes differ by type of power--piston engines (propellers), turbine engines (turbojet, turboprops, turbofan), ramjet engines, nuclear power plant, rocket engine.

3. The people who operate airplanes are trained in special schools.

a. All planes have at least a pilot, the captain, who flies the plane.

b. Large planes have crews of people to operate them--pilot, co-pilot, navigator, flight engineer, stewardess (passenger planes).

c. The crewmen, especially the navigator, must be able to read special charts, to operate radar equipment, and to send and receive radio messages in order to guide the pilot in flying the plane.

d. The crewmen must know all the rules and signals for operating the plane.

4. There are special places where airplanes land to load and unload.

a. Airplanes need a runway or air strip for landing and taking off.

b. Most airplanes land at airports.

(1) An airport has a passenger terminal where travelers buy tickets, check baggage, eat, and wait for planes.

(2) An airport contains hangars which are large buildings where planes are cleaned, serviced, repaired, and stored.

(3) An airport has long, level runways for planes to land and take off.

(4) An airport has a control tower where people, called flight controllers, direct the flow of air traffic.

5. Helicopters are special aircraft used for transportation.

a. Helicopters and airplanes are different.

(1) Helicopters have no wings; instead, they have two sets of propellers called rotors on top.

(2) Helicopters fly more slowly than airplanes.

(3) Helicopters can land straight down and take off straight up; they do not need a runway, so they can land on any flat surface.

b. Helicopters have many uses.

(1) Helicopters are used to transport people, animals, and goods for short distances.

(2) Helicopters are used for special tasks--for observing and reporting traffic conditions, for directing traffic, for rescue work, for crop-dusting, for military operations.

6. Spaceships are the newest, most modern type of aircraft or spacecraft.

a. Spaceships are used to transport people called astronauts to the moon and other places in space.

b. Spaceships use very special rocket engines which supply the power for the long trips.

G. Boats are the primary means of water transportation for people, animals, and goods.

1. Boats are alike in that they are all built to operate in water, and they have certain basic parts.

2. Boats are different in many ways.

a. Boats differ by physical characteristics--color, size, shape, accessories and/or special features.

b. Boats differ by location.

(1) Small boats are used primarily on rivers, lakes, and small canals.

(2) Large boats, called ships, are used on oceans and large canals.

c. Boats differ by type and function.

(1) Some boats are used by people for pleasure and recreation--ski boat, fishing boat, houseboat, row boat, sailboat, cabin cruiser, yacht, raft, canoe.

(2) Some boats are used to transport people and goods--ferry boat, river boat, trawlers.

(3) Some boats are used to transport only goods--barge, tugboat, dredges.

(4) A few ships are used to transport people--passenger liner.

(5) Most ships are used to transport goods--cargo liner (grain, meat, fruits, wood pulp, ore, coal), tanker (oil and other liquids).

(6) Other large ships are military ships--battleships, aircraft carriers, submarines.

(7) Some boats are designed to travel on ice.

d. Boats differ by type of power--wind (sailboat), manpower (row boat, canoe), gasoline engine (runabout, cabin cruiser, yacht), diesel engine (cabin cruiser, yacht, ships), steam engine (steamboat), nuclear power (ocean liners), turbine engines (ocean liners, tankers).

3. There are many different trained people who work on ships.

a. A ship has a captain, engineer, navigator, radio operator, and seamen.

b. The people who work on ships have gone to special schools to be trained.

c. The crewmen, especially the navigator, must be able to read special charts of the ocean in order to guide the ship in the right direction.

d. The crewmen must know all the rules and signals for operating the ship.

4. There are special places where boats and ships load and unload, anchor, or dock.

a. Small boats load and unload at a launch or dock.

b. Large boats and ships load and unload at a pier, dock, or wharf in a harbor or port.

H. Transportation vehicles differ in how fast they can travel.

1. Aircraft are the fastest vehicles for transporting people and goods.

a. Spaceships are the fastest vehicles.

b. Airplanes are replacing the use of many trucks, trains, and ships.

c. Cargo which is very heavy or bulky is still transported by truck, train, and ship.

2. Trains are slower than airplanes, but faster than cars, trucks, and buses.

a. Many trains have been replaced by other means of transportation--airplanes, cars, buses.

b. There are still many freight trains, but there are only a few passenger trains.

c. Trains are being improved so they will provide much faster transportation service for people going from city to city.

3. Boats and ships are the slower means of transportation across water than airplanes.

4. Vehicles with no engines or motors--such as wagons, baby carriages, wheelbarrows, grocery carts, bicycles and tricycles--are the slowest vehicles for transporting people and goods.

5. People and animals are a slower means of transportation than any of the transportation vehicles.

I. Transportation vehicles cause many problems.

1. Transportation vehicles cause traffic problems.

a. City areas become congested by too many cars, buses, and trucks.

b. Highways become congested with traffic, particularly during weekends and holidays.

c. Airplanes cause air traffic problems near busy airports.

2. Transportation vehicles with engine exhaust cause pollution of the air.

3. Transportation vehicles and their operators cause accidents.

J. Transportation vehicles are a very important and necessary part of our lives.

1. People depend on automobiles for personal transportation.

2. People depend on trucks and trains to transport most of their food and other essentials.

3. People depend on boats and ships for transportation in places where cars, trucks, trains, and buses cannot operate and at times when planes are too expensive or not suitable.

4. People depend on airplanes for the fast transportation of themselves, mail, and foods.

III. Transportation Unit--Skills

Visual Skills

Likeness and difference skills: look at pictures of types and models of cars, trains, trucks, boats, planes to determine likenesses and differences in color, shape, size, number, external part, internal part, orientation (The Truck and Bus Book, The Wonder Book of Trucks, The Boat Book)
What's missing?
Word matching, recognition, identification
Whole-part-whole: puzzles, vehicle parts--pasting, pasting basic shapes to make vehicles, Rig-a-Jigs
Patterning (if appropriate)
Map reading (cars, trucks, buses) and chart reading
Sign and signal reading (traffic signs and signals for cars, trucks, buses)

Auditory Skills

Discriminating among sounds of vehicles in environment: horns, sirens, whistles (The Rattle-Rattle Dump Truck)
Rhythm and sound patterning: vehicle horns, songs, records
Rhyming:
1. Find rhyming pairs.
2. Produce words which rhyme with a given word.
(Planes, Cars, Trains, Boats; Keep Your Eyes Open; The Little Red Caboose)

Initial Sounds:
1. Discriminate and identify words that begin with the same sound.
2. Produce words which begin with the same sound as a given word.

Discriminate and reproduce voice intonations in dramatic play.

Concept Development

Color

review: all

Shape

review: circle, square, triangle, rectangle, diamond (with traffic signs); construction of vehicles using basic shapes (The Boat Book)
introduce: hexagon or six-sided shape (stop sign)
review: cube, sphere, cone, cylinder (with vehicles)
review: stripes, spotted or polka dots, print, checks, solids (with vehicles)

Size

review: all
stress: comparatives with three or more objects or pictures; verbal comparisons with no objects or pictures (The Little Fireman, The Little Red Caboose, The Too Little Fire Engine, Little Toot)

Number

review: sets 0-10 (with dominoes); numerals 0-12 with sets; fractions (if appropriate); subsets (with train cars)
stress: natural order of numerals (follow the dots); greater than, less than; story problems--set union, finding a remaining set, finding a missing set; counting to 100
introduce: counting by decades; uni-, bi-, tri- (cycles)

Position

review: all (with parts of vehicles)
stress: far and near (in pictures of vehicles; in relation to loudness of sound of vehicle); combinations of position words; ordinal position--first to tenth (One Is the Engine, Five Little Firemen, The Big Book of Real Trucks)

Volume

review: some, more, most; some, less, least; full, empty, half-full (compare capacity of different size vehicles; compare size of load with capacity of vehicle)

Auditory

review: loud, soft; high, low; long, short (with horns, sirens, whistles)
stress: volume of sound in relation to distance of vehicle, sizes of vehicles; comparisons of sounds

Texture

review: all
stress: comparatives (with seat coverings, dashboard, condition of road--smooth, rough, bumpy; water and air--smooth, rough, choppy)

Weight

review: all
stress: comparatives; weight of vehicle in relation to size and capacity

Temperature

review: all (hot and cold engines and motors)

Motion

review: all
stress: speed comparisons; speed regulations for vehicles (Planes, Trains, Cars, and Boats)

Time

review: night, day; morning, noon, night; afternoon, evening; yesterday, today, tomorrow; this week, next week, last week; early, late, on time; seasons
stress: days of the week; weekend, weekday; time of day using clock--numerals 1-12 (with vehicle schedules, daily routine, delivery time)

Age

review: all (with age of vehicles)
stress: comparatives

Affective

stress: any emotions which are emphasized in stories (determination--The Little Engine That Could, Little Toot)

Association Skills

Occupations with vehicles
Uniforms with occupations
Vehicles with uses (The Rattle-Rattle Dump Truck)
Sounds with vehicles
Signs and signals with meanings
Riddles
Questions

Classification Skills

Vehicles by number of wheels, by land vs. water vs. air, by use
Stress: verbal classification with no picture

Sequencing Skills

Book events (The Noisy Book; Planes, Trains, Cars, and Boats; The Little Red Caboose)
Trip events
Original stories with logical sequence of events
Steps in starting a car engine
Follow sequence of three or four directions

Critical Thinking Skills

Interpreting stories and events: draw relationships; anticipate and predict; interpret emotions; create an alternative story ending; create titles for original stories; create alternative titles for commercial stories
Problem-solving: mathematical, social, scientific
Absurdity games

Verbal Response Skills

Complete sentence structure
Articulation
Fluency: write stories; description contests; review events; write experience chart and individual stories; discussions; dramatizations and role play; Twenty Questions; riddles
Sentence structure: questions (Twenty Questions); negatives (with classification and Twenty Questions) (The Noisy Book); "if-then" questions; comparatives with all basic concepts; "or" statements

Motor Response Skills

Coordination Skills

pasting
modeling
drawing (pencils)
painting (water colors)
coloring
cutting
paper folding
tracing (routes)
following dots
printing

Orientation Skills

left-to-right
top-to-bottom
front-to-back

IV. Sequenced Instructional Guide

UNIT UNDERSTANDING: A. Transportation is the means by which people, animals, food, and other goods are carried from one place to another.

SKILLS TO BE DEVELOPED	SUGGESTED INSTRUCTIONAL ACTIVITIES
Association 3. Vehicles with where they travel **Sequencing** 2. Book events **Verbal Response** 1.,2. Fluency: discussions **Motor Response** 2. Coordination: drawing and painting **TEACHER'S NOTES:**	1. Introduce transportation by asking the children how they get to school. Some may walk and others may come in buses or cars. Tell them that both walking and riding are forms of transportation. Most people, animals, and goods are transported by vehicles. Vehicles usually have wheels or runners. Name a few vehicles and ask the children to name others. 2. Read a book about transportation; e.g., the True Book of Transportation. (This book discusses transportation from its earliest existence to methods used today.) After the book has been discussed, ask each child to draw or paint a picture of a form of transportation. 3. Make a wall display of vehicles and where they usually travel. Start with a scene of land, water, air, roads, and train tracks. Add vehicles as they are introduced. (See Appendix for more suggestions.)

UNIT UNDERSTANDING: B. Cars are a major means of land transportation for people.

SKILLS TO BE DEVELOPED		SUGGESTED INSTRUCTIONAL ACTIVITIES
Visual		1. Bring models and/or pictures of cars to class. Discuss the differences (make, age, type, etc.). Give each child a magazine and ask him to cut out pictures of cars. After the pictures have been collected, discuss how they are alike and different.
1.,2.,7.	Likeness and difference	
2.	Whole-part-whole	2. Have a whole-part-whole pasting activity using a car. (Use a model if needed.) Cut simple pieces from different colors of construction paper. Emphasize that the cars differ in color, size, and shape just as real cars do.
6.,7.	Word matching, recognition, and identification	
6.,7.	Sign reading	
Auditory		3. Review all initial consonants learned by having a car race. The chalk board or some other large area could be used as a track. Give each child a small car. Hold up an initial consonant. The child who recognizes the consonant and gives a word that begins with that sound or letter moves his car one space. The child who reaches the finishing line first wins the race. This activity is good for small groups of children.
3.,7.	Initial sounds	
8.	Rhyming	
Concept Development		4. To review numeral recognition and the natural order of numerals, have a follow-the-dot activity. Arrange the numerals one to ten on paper in the shape of a car. The children can follow the dots and numerals and then color in their pictures.
4.	Number: natural order (1-10) recognition (1-10)	
5.	Shape: hexagon, basic shapes	5. Bring to class several shapes that are used as traffic signs. (The children should be able to recognize these shapes.) Introduce the words that are used on the signs, and discuss what good drivers do when they see these signs. Introduce the hexagon. Tell the children that this six-sided sign usually means "stop."
Association		
5.,6.,7.	Signs with their meaning	
Sequencing		
7.	Steps in starting a car	

Critical Thinking

8. Create an alternative story ending

Verbal Response

1.,8. Fluency: discussions

Motor Response

1.,2.,4. Coordination: cutting, pasting, following dots, coloring

TEACHER'S NOTES:

6. Have a word-matching activity using words that are found on traffic signs. Have the traffic signs displayed and the words written on cards. Have the children match the words on the cards with the traffic signs. If they can do this, ask them what the sign says and means.

7. Before a driver is permitted to drive a car, he must pass certain tests. Set up a driver's testing center. The test could be divided into three parts--eye test, written, and driver's test. Initial consonants could be used for the eye test. The child must recognize the consonants to pass. The written test could be a likeness and difference activity with cars. The driver's test should come last. The child must remember to fasten his seat belt, and start the car. He must also be able to recognize the traffic signs. A special obstacle path should be set up. Each child should have a card with places that may be checked after he successfully passes each part of the test. Tricycles, small cars, tractors, or other play vehicles could be used for the driving test.

8. Discuss the many ways that a family may obtain a car. Families usually buy a car. They use the money paid them for working to pay for the car, car insurance, gasoline, and repairs. People who need a car for a short period of time may rent a car. Some people use taxis for transportation. When taxis are used, they must pay money for each trip. Read a book about taxis; e.g., The Taxi That Hurried. (It illustrates how taxis are used and is also a good rhyming book.) Have the children create an alternative story ending.

UNIT UNDERSTANDING: C. Trucks are important vehicles for the transportation of animals and goods on land.

SKILLS TO BE DEVELOPED		SUGGESTED INSTRUCTIONAL ACTIVITIES
Visual		1. To introduce trucks as a form of transportation, take a trip to a truck lot. Point out the differences in types (pick-up, van, delivery, etc.), function (moving van, fire truck), and physical characteristics. If possible, let the children climb into the cab so that they can see the sleeping area and other features of the truck. Write an experience chart story of the trip. Have a word-matching activity with words in the story.
1.	Likeness and difference	
1.	Word matching	
3.	Whole-part-whole	
3.	What's missing?	
Auditory		2. Teach the children the poem "Trucks," found in Poems and Verses About the City. The poem is relatively long for the class to learn it in its entirety, but the children could be divided into groups and could learn different sections of the poem. Select a word in the poem and have the class tell you another word in the poem that rhymes with it. Think of other words which rhyme with the rhyming words in the poem. You might try another poem about trucks if you prefer.
2.	Rhyming	
2.,5.	Rhythm patterning	
Association		3. Give each child a set of construction paper shapes representing the basic parts of a truck. Leave out one basic part from each child's set. See if he can detect and ask for the missing part. Have him paste his truck together.
4.	Occupations with vehicles	
Sequencing		4. Read The Big Book of Real Trucks or another book about truck drivers. If possible, invite a truck driver to the class. Ask him to tell the group about his special occupation.
1.	Trip events	
Verbal Response		5. Teach the children songs about trucks. "Trucks" and "The Dump Truck" are two songs that the children may enjoy.
1.,6.	Fluency: experience chart, discussions	
Motor Response		
3.,6.	Coordination: pasting, painting, modeling	

TEACHER'S NOTES:

6. Read a book about service stations; e.g., Ben's Busy Service Station. After the book has been discussed, the children could make their own service station. Corrugated boxes could be used as the station. Some members of the class could paint and decorate the station. (Tissue rolls may be used as gas pumps.) Vehicles of clay could be made by other members of the class. Model vehicles could also be used.

UNIT UNDERSTANDING: D. Buses are important vehicles for the transportation of people on land.

SKILLS TO BE DEVELOPED		SUGGESTED INSTRUCTIONAL ACTIVITIES
Visual		1. Bring pictures and/or models of buses to class. Include school buses, local buses, and cross country or tour buses. Compare the buses, and discuss likenesses and differences. Have the children paint or draw pictures of buses.
1.	Likeness and difference	
Auditory		2. If the children are not familiar with school buses, bring a picture of a school bus, and talk about its special function. Read Andy and the School Bus. See if the children can discuss Andy's feelings.
3.	Rhythm patterning--songs	
5.	Rhyming	3. Teach the children songs about buses and bus trips. "Riding on the Bus" is a song that the children may enjoy. Later, this song may be used while traveling on field trips.
Sequencing		
4.	Trip events	4. If possible, arrange a bus trip to a nearby town. Try to arrange for the children to purchase tickets and give their tickets to the bus driver. Tell them that they are passengers on the bus. Passengers pay cash for tickets. If a bus trip is not possible, a visit to a bus station and a tour of one of the buses could be arranged or ride somewhere on a local bus.
7.	Verbal	
Critical Thinking		
2.	Interpreting emotions	5. Read a book about buses; e.g., ABC of Buses. (This book discusses the different parts of a bus. Since it is in rhyme form, the children will be able to remember the parts easier.) As you read the book, see if the children can detect the rhyming words.
Verbal Response		
1.,5.,6.	Fluency: discussions	
6.	Sentence structure: questions	
Motor Response		
1.	Coordination: painting, drawing	

TEACHER'S NOTES:

6. To emphasize the importance of a bus driver's job and the special training that he must have, read I Want To Be a Busdriver. After reading the book, invite a busdriver to the classroom. Encourage the children to ask relevant questions by discussing the book before the visit.

7. Have a vocal sequence game using the bus as the form of transportation. If possible, arrange the children in a circle. The first child says, "I'm going on a bus trip and I'm going to take (object)." The second child must first name the object that the first child is taking and add an object that he will take. The other children will follow the same procedure until each child has gone on the trip. Be sure to emphasize that the children must name the objects in the exact sequence. A list of the sequence could be made to help the children remember.

UNIT UNDERSTANDING: E. Trains are a very important means of land transportation for goods, animals, and people.

SKILLS TO BE DEVELOPED		SUGGESTED INSTRUCTIONAL ACTIVITIES
Visual		1. Read the book The Little Engine That Could and/or show the film. Discuss the story. If you have access to a model train and have room to set it up in your classroom, it would be very motivating and instructive to the children. Discuss the parts of a train and the different kinds of trains.
1.	Likeness and difference	
3.	Whole-part-whole	
Concept Development		2. Give each child a picture of a train or engine and encourage him to create a story about the picture. If possible, cartoon pictures or pictures of trains in action should be used.
3.,5.	Number: ordinal position, subsets	
Sequencing		3. Have the class make its own train. Bring in boxes and give each child a box to paint. When the paint has dried, have the children line up their cars. Talk about ordinal position. They can decide for what purpose their cars will be used and place pictures on the boxes to indicate their contents.
2.	Original stories with logical sequence of events	
Critical Thinking		4. Read I Want To Be a Train Engineer. Discuss the engineer's job, and the training that he must have. Invite an engineer to the classroom. If possible, he may arrange for the children to take a short train ride.
6.	Absurdity games	
Verbal Response		5. Use train cars for set union and separation. Give the children blocks or PLDK links. Ask them to make a train with a set of five cars, four cars, etc. Tell them to make two trains by separating a set of the cars. Then have the children unite the subsets to make a single train again.
1.,2.,4.	Fluency: discussions, write stories	
Motor Response		
3.	Coordination: painting	

TEACHER'S NOTES:

6. Play an absurdity game with vehicles. Give the children an absurdity and see if they are able to detect the errors. For example, "Today was the engineer's sixth birthday." "The engine is the last car on the train." When the children understand the game, encourage them to create absurdities for their classmates.

UNIT UNDERSTANDING: F. Aircraft, such as airplanes, helicopters, and rockets, are the means of transportation of people, animals, and goods by air.

SKILLS TO BE DEVELOPED	SUGGESTED INSTRUCTIONAL ACTIVITIES
Visual 1. Likeness and difference 2. Word matching Association 4. Planes with characteristics Critical Thinking 3. Drawing relationships Verbal Response 1.,4. Fluency: experience chart, description contests 4. Complete sentence structure TEACHER'S NOTES:	1. If possible, take a trip to an airport. Emphasize the differences in airplanes: color, size, shape, etc. Point out the like characteristics of the planes (wings, nose, tail, engine, landing gear, seats, cockpit, etc.). Write an experience chart about your trip. 2. Using the experience chart of your airport trip, have a word-matching activity. Select words on your chart. (It may help to underline these words in red.) Have those words written on individual cards. See if the children are able to match the words on the cards with the words on the charts. 3. Read I Want To Be a Pilot. This book emphasizes the training and qualities necessary to be an airplane pilot as well as the basic parts of an airplane. 4. Have a description contest with airplanes. Divide the class into groups. Give each group an airplane. Ask them to name as many things as they can think of about their airplane. Make a list of all sentences given. After each group has finished, read each group's list to the entire class. You may wish to repeat this activity at the end of your discussion of airplanes to see if the children will name other characteristics that were not named previously.

TEACHER'S NOTES:

UNIT UNDERSTANDING: G. Boats are the primary means of water transportation for people, animals, and goods.

SKILLS TO BE DEVELOPED		SUGGESTED INSTRUCTIONAL ACTIVITIES
Visual		1. Introduce boats by showing the class several kinds of toy boats. Have them discuss how the boats are alike and different. Point out and label the parts of each boat. A tub of water can be used to float the boats in.
1.,2.,3.	Likeness and difference	
2.,3.	Whole-part-whole	
Auditory		2. Bring to class pictures or puzzles of different types of boats. Talk about the special features that each has and about how they are alike and different. Afterwards, have a puzzle activity with different types of boats (motor boats, tugboats, etc.). A list of suggested puzzles may be found in the materials list. Additional puzzles can be made by pasting pictures of boats on cardboard and cutting them up into pieces.
6.	Rhythm patterning--songs	
Concept Development		
3.	Shape: basic	
6.	Number: counting	3. Read a book about tugboats; e.g., Little Toot. (This is the story of a tugboat that always wanted to play.) Talk about the tugboat and its parts. Give each child construction paper pieces for two tugboats. The pieces should be relatively simple and of different colors. Include three sizes of rectangles, two sizes of squares, and two sizes of circles. Give each child a large sheet of construction paper and ask him to make and paste two boats that are different.
Verbal Response		
1.,3., 4.,5.,6.	Fluency: discussions, descriptions	
Motor Response		
3.,4.	Coordination: pasting, folding, gluing, blowing	4. Read a book about different kinds of boats; e.g., The Boat Book. After discussing this book, have a sailboat race. You will need a tub of water. The children can make boats from bottle corks. To make the sail, draw a triangle, fold it over and glue it to a toothpick. The toothpick is then stuck in the cork. Each child attempts to blow his boat from one side of the tub to the other without turning it over.
TEACHER'S NOTES:		

5. Show the film "The Busy Harbor" or another film about harbors. Discuss or emphasize the concepts of dock, wharf, or pier as well as the people who work at the harbor.

6. If possible, take a trip to a harbor, lake, or river dock. Here the children can see all kinds of boats (fishing boats, ferry, ski boats, houseboats, etc.). Encourage the children to count and describe the boats. After you return, the "Boat Song" is a good song to teach the children. The tempo of the song changes according to the kind of boat.

UNIT UNDERSTANDING: H. Transportation vehicles differ in how fast they can travel.

SKILLS TO BE DEVELOPED	SUGGESTED INSTRUCTIONAL ACTIVITIES
Visual 1. Likeness and difference Concept Development 1.,3. Motion: speed comparisons 2. Number: counting by decades, greater than, less than Critical Thinking 3. Absurdity games Verbal Response 1. Fluency: discussions Motor Response 1. Orientation: left to right TEACHER'S NOTES:	1. Have the children arrange models, pictures, or flannel cut-outs of the various means of transportation from slowest to fastest, left to right. Discuss the likenesses and differences in speeds of vehicles. 2. Using colored blocks or other objects, introduce the concept of "greater than, less than." Start with small numbers. For example, have a set of five blocks and a set of four blocks. Demonstrate that a set of five blocks is greater than a set of four blocks or a set of four blocks is less than a set of five blocks. Do a verbal example using decades (20 is greater than 10), after the children have had several different experiences with this concept. 3. Play an absurdity game with vehicles. For example: "If I wanted to go downtown very fast, I would ride a grocery cart." "An airplane travels very slowly; so if I wanted to travel fast, I would ride a tricycle." Ask the children to find the absurdity and supply the correct word.

UNIT UNDERSTANDING: I. Transportation vehicles cause many problems.

SKILLS TO BE DEVELOPED	SUGGESTED INSTRUCTIONAL ACTIVITIES
Association 2. Signs with meanings Critical Thinking 1. Interpreting stories and events, interpreting emotions 3. Problem solving Verbal Response 1.,2. Fluency: dramatization and role play, discussions, experience chart Motor Response 3. Coordination: painting TEACHER'S NOTES:	1. The Taxi That Hurried is a good book to emphasize traffic problems that occur as a result of streets becoming congested. Read the story to the class. Ask the children to describe what the passengers in the cars are feeling or thinking while they are caught in the traffic and to describe what vehicles are involved. 2. Review traffic signs and their meanings. Discuss what would happen if there were no traffic signs. Select children and toy cars for role play of an automobile accident that occurred as a result of the lack of traffic signs. Talk about what the driver must do, what vehicle must come when there is an accident, and what special occupations are involved (nurses, ambulance drivers, doctors, police, tow truck drivers, etc.). 3. Secure pamphlets or a film on air pollution. Emphasize how engine exhaust is one cause of air pollution. If the children are able to grasp the ideas of air pollution, ask each child to paint a picture illustrating a problem related to air pollution.

UNIT UNDERSTANDING: J. Transportation vehicles are a very important and necessary part of our lives.

SKILLS TO BE DEVELOPED		SUGGESTED INSTRUCTIONAL ACTIVITIES
Visual		1. Bring to class pictures of airplanes, cars, trucks, buses, boats, ships, and trains, or bring toy vehicles. Ask the class to describe the objects in terms of likeness and difference in usage, parts, methods of locomotion, etc.
1.	Likeness and difference	
2.,9.	Whole-part-whole	
Auditory		2. Bring to class assorted construction paper pieces of all vehicles covered during this unit. Give each child the parts for a specific vehicle. See if he can figure out what vehicle he has from the parts given and reconstruct the vehicle and paste it together on paper.
5.	Discriminating among sounds of vehicles	
Association		3. Using pictures of different objects, see if the children can determine the best mode of transportation for delivering a particular item. Give imaginary situations in which the choice of transporting the good is limited.
4.,5.,10.	Occupations and vehicles, sounds with vehicles, vehicles with their characteristics	
Classification		4. As a review of all occupations studied during this unit, have an association activity with occupations and vehicles. Name an occupation such as pilot. Ask the class with which vehicle a pilot would work. Once the children are able to do the activity, ask them to give an occupation, and have other children name the vehicle.
6.	By function or purpose By land vs. air vs. water By number of wheels By use	
Sequencing		5. Using tapes or records, have an activity to test the children's ability to discriminate among the sounds of vehicles. A tape can be made of airplane sounds, a siren, a car horn, an ice cream truck, train bells and whistles, a motor boat, etc. Let the children repeat the sounds heard in the proper order.
5.	Sounds	
Critical Thinking		
2.,3.,7.,8.	Problem solving	

Verbal Response

1. Fluency: descriptions

Motor Response

2.,9. Coordination: painting, hammering, pasting

TEACHER'S NOTES:

6. Give each child a magazine and have him find pictures of vehicles. Collect all the pictures and have the children classify them by function or purpose, by land vs. air vs. water, by number of wheels, or by use. These pictures could be pasted on paper and made into a booklet.

7. During play period or another appropriate time, do a problem-solving activity. Have a pile of blocks on one side of the play area. Have a wagon or wheelbarrow sitting outside the area, but in the children's view. Ask the children to figure out the easiest and fastest way to move the blocks from one side to the other.

8. To demonstrate the necessity of vehicles, create problem situations which will dramatize their importance. For example: "Let's pretend that there are no vehicles in the city. There is a fire down the street. How will we put it out?" If they suggest that you call the fire department, you must remind them that there are no fire trucks because a fire truck is a vehicle, and there are no vehicles. Or, give a situation in which you must shop without a grocery cart or go downtown without cars, buses, bicycles, or taxis.

9. Different kinds of vehicles can be made by the children using precut pieces of wood and hammers and nails. They can be painted with tempera paint.

10. Play a clue game. Describe transportation vehicles. Start with more difficult clues. Give each child a chip or token when he is able to raise his hand and give the name of the vehicle described. The child with the most chips at the end of the game is the winner.

V. Instructional Materials

BOOKS		SOURCE
ABC of Buses	Shuttlesworth, D.	Doubleday & Co., Inc., 1965
ABC of Cars and Trucks	Alexander, A.	Doubleday, 1956
Aboard a Bus	Smith, M.	Melmont, Inc., 1955
About Cargo Ships	Uhl, M. J.	Melmont Publishers, 1962
All Aboard!	Davis, D.	Watkins-Strathmore Co., Inc., 1963 (Storyland)
Andy and the School Bus	Beim, J.	William Morrow & Co., 1947
Ben's Busy Service Station	Barr, J.	A. Whitman, 1956
Best Word Book Ever	Scarry, R.	Golden Press, 1963 (Giant Golden)
The Big Book of Real Boats and Ships	Zaffo, G.	Grosset & Dunlap, 1951
The Big Book of Real Building and Wrecking Machines	Zaffo, G. J.	Grosset & Dunlap, 1951
The Big Book of Real Trains	Cameron, E.	Grosset & Dunlap, 1949
The Big Book of Real Trucks	Zaffo, G. J.	Grosset & Dunlap, 1950
The Big Treasure Book of Wheels	Sutton, F.	Grosset & Dunlap, Inc., 1953
The Boat Book	Kaufman, J.	Golden Press, 1965
The Boats on the River	Flack, M.	The Viking Press, 1946
The Book of Airplanes	Zaffo, G. J.	Grosset & Dunlap, 1951

BOOKS		SOURCE
Childcraft Volume 1 - Poems and Rhymes "Highway, Byway, and City Rhymes" Volume 6 - How Things Change Volume 7 - How We Get Things Volume 8 - How Things Work Volume 10 - What People Do Volume 14 - Places to Know		Field Enterprises Educational Corp., 1966
Choo Choo	Burton, V. L.	Houghton Mifflin, 1937
Davy Goes Places	Lenski, L.	Henry Z. Walck, Inc., 1961
A Dragon in a Wagon	Rainwater, J.	Golden Press, 1966 (Little Golden)
Five Little Firemen	Brown, M. W., & Hurd, E. T.	Golden Press, 1949 (Little Golden)
The Giant Nursery Book of Things That Go	Zaffo, G. J.	Garden City Books, 1959
The Great Big Fire Engine Book	Gergely, T. (Ill.)	Golden Press, 1950 (Big Golden)
A Horse for Sherry	Barr, K.	Henry Walck, Inc., 1963
How Do You Get From Here to There	Charles, N.	MacMillan Co., 1962
I Want To Be a Bus Driver	Greene, C.	Children's Press, 1957
I Want To Be a Mechanic	Greene, C.	Children's Press, 1959
I Want To Be a Pilot	Greene, C.	Children's Press, 1957
I Want To Be a Policeman	Greene, C.	Children's Press, 1958
I Want To Be a Road Builder	Greene, C.	Children's Press, 1958

BOOKS		SOURCE
I Want To Be a Ship Captain	Greene, C.	Children's Press, 1962
I Want To Be a Train Engineer	Greene, C.	Children's Press, 1956
Jolly Blue Boat	Courtright, J., & Courtright, J.	Children's Press, 1962
Keep Your Eyes Open	Folsom, M.	Wonder Book, 1965 (Easy Reader)
Larry's Plane Ride	Lawrence, A.	Fedeler Co., 1958
Let's Go to a Harbor	Hammond, D.	G. P. Putnam's Sons, 1959
Let's Go to an Airport	Sootin, L.	Putnam, 1958
Let's Take a Bus Trip	Pope, B. N., & Emmons, R. W.	Taylor Publishing Co., 1967 (Your World: Series II)
Let's Take an Airplane Trip	Pope, B. N., & Emmons, R. W.	Taylor Publishing Co., 1966 (Your World: Series I)
Let's Visit a Ship	Pope, B. N., & Emmons, R. W.	Taylor Publishing Co., 1967 (Your World: Series II)
Let's Visit a Spaceship	Pope, B. N., & Emmons, R. W.	Taylor Publishing Co., 1968 (Your World: Series IV)
Let's Visit the Fire Station	Pope, B. N., & Emmons, R. W.	Taylor Publishing Co., 1966 (Your World: Series I)
Let's Visit the Railroad	Pope, B. N., & Emmons, R. W.	Taylor Publishing Co., 1968 (Your World: Series IV)
The Little Airplane	Lenski, L.	Henry Walck, Inc., 1959
The Little Auto	Lenski, L.	H. Z. Walck, 1959

BOOKS		SOURCE
The Little Engine That Could	Piper, W. (retold by)	Platt & Munk, 1961
Little Fire Engine	Lenski, L.	Henry Z. Walck, Inc., 1946
The Little Fireman	Brown, M. W.	William R. Scott, 1938
The Little Red Caboose	Potter, M.	Golden Press, 1953 (Little Golden)
Little Toot	Gramatky, H.	G. P. Putnam's Sons, 1939
Little Train	Lenski, L.	Henry Z. Walck, Inc., 1955
Lolly's Pony Ride	Steiner, C.	Doubleday, 1959
Mike Mulligan and His Steam Shovel	Burton, V. L.	Houghton & Mifflin, 1939
Mr. Charlie's Gas Station	Hurd, E.	Lippincott, 1956
The Noisy Book	Brown, M. W.	Harper & Row, 1939
Old Silversides	Hurd, E. T.	E. M. Hale & Co., 1951
One Is the Engine	Meeks, E.	Follett Co., 1956
Perky Little Engine	Friskey, M.	Children's Press, 1967
Piggyback	Burleigh, D.	Follett Publishing Co., 1962
Planes, Trains, Cars and Boats	Kalish, L., & Kalish, M.	Golden Press, 1963 (Big Golden)
Pogo's Sky Ride	Nordling, J., & Nordling, E.	Henry Holt & Co., 1943
The Rattle-Rattle Dump Truck	Geis, D.	Wonder Books, 1958
The Rattle-Rattle Train	Geis, D.	Wonder Books, 1957 (Grosset & Dunlap)

BOOKS		SOURCE
Red Light, Green Light	MacDonald, G.	Doubleday & Co., Inc., 1944
Sails, Wheels and Wings: A Picture Story of Transportation	Lilienthal, S.	Grosset & Dunlap, 1937
Saturday Walk	Wright, E.	William R. Scott, Inc., 1941
The Taxi That Hurried	Mitchel, L. S.	Golden Press, 1946 (Little Golden)
The Too Little Fire Engine	Flory, J.	Wonder Books, 1950
The Truck and Bus Book	Dugan, W.	Golden Press, 1966 (Golden Shape)
The Truck That Flew	Morris, D. H.	G. P. Putnam's Sons, 1942
The True Book of Transportation	Possell, E.	Children's Press, 1957
Who Built the Highways?	Bate, N.	Charles Scribner's Sons, 1953
The Wonder Book of Firemen and Fire Engines	Peters, L.	Wonder Books, 1956
The Wonder Book of Trains	Peters, L.	Wonder Books, 1952
The Wonder Book of Trucks	Peters, L.	Wonder Books, 1954
You Visit a Fire Station - Police Station	Meshover, L.	Benefic Press, 1965
You Visit a Steamship - Airport	Meshover, L.	Benefic Press, 1966
Wheels	Jackson, K.	Simon & Schuster, 1952 (Little Golden Library)

FILMS	SOURCE
The Big Wide Highway (11 min., b/w)	Coronet Films
Billy's Helicopter Ride (11 min.)	Coronet Films
The Busy Airport (11 min., b/w)	Coronet Films
The Busy Harbor (11 min., b/w)	Coronet Films
Fred and Billy Take an Airplane Trip (11 min., b/w)	Coronet Films
Jimmy Visits the City (11 min., b/w)	Coronet Films
A Letter to Grandmother (11 min., b/w)	Coronet Films
The Little Engine That Could (11 min., b/w)	Coronet Films

RECORDS	SOURCE
Sing a Song of Home, Neighborhood and Community (4 - 78 rpm)	Bowmar Records

Songs: Airplane Song

At the Harbor

The Happy Bus

Riding on a Train

Trucks

RECORDS		SOURCE
Transportation (12" L.P.)		Bowmar Records
Stories: Choo Choo		
Larry's Airplane Ride		
The Boats on the River		
Two Cars		

SONGS		SOURCE
The Fireside Book of Children's Songs	Winn, M., & Miller, A. (Eds.)	Simon & Schuster, 1966
The Choo-Choo Train (p. 94)		
Row, Row, Row Your Boat (p. 185)		
The Magic of Music, Grade 1	Watters, L. E., et al. (Eds.)	Ginn & Co., 1965
The Bus (p. 145)		
Making Music Your Own	Landeck, B., et al. (Eds.)	Silver Burdett Co.
Paw Paw Patch (p. 141) (Tune for "My Little Red Wagon")		
Music for Young Americans	Berg, R. C., et al. (Eds.)	American Book Company, 1966
Choo-Choo Train (p. 42)		

SONGS		SOURCE
Music Round About Us	Heller, R. (Ed.)	Follett Publishing Co., 1964
Boats (p. 95)		
Down at the Station (p. 101)		
The Dump Truck (p. 75)		
Going Riding (p. 105)		
In My Motorboat (p. 103)		
Riding in an Airplane (p. 106)		
Riding in My Car (p. 98)		
Riding on the Bus (p. 104)		
Riding on the Train (p. 100)		
The Steam Shovel (p. 74)		
A Train Trip (p. 102)		
Whirlybird (p. 99)		
Music Round the Town	Krone, M. T. (Ed.)	Follett Publishing Co., 1963
At the Airport (p. 58)		
In an Airplane (p. 59)		
On Our Train (p. 53)		
The Railroad Train (p. 54)		
Ships in the Harbor (p. 56)		

SONGS		SOURCE
New Music Horizons II	McConathy, O., et al. (Eds.)	Silver Burdett Co., 1944
Riding My Bicycle (p. 89)		

POEMS, FINGERPLAYS, AND ACTION VERSES		SOURCE
Poems and Verses About the City	Bissett, D. J. (Ed.)	Chandler Publishing Co., 1968
Bus Stop (p. 37)		
City Street (p. 33)		
Down in the Subway (p. 52)		
Ferry-Boats (p. 53)		
Let's Ride the Bus (p. 50)		
Motor Cars (p. 31)		
Observation (p. 35)		
Rides (p. 68)		
Someday Ann (p. 84)		(See Appendix)
Traffic Sounds (p. 32)		
Trucks (p. 30)		
Tugs (p. 39)		
Underground Rumbling (p. 34)		

POEMS, FINGERPLAYS, AND ACTION VERSES		SOURCE
Poems and Verses to Begin On	Bissett, D. J. (Ed.)	Chandler Publishing Co., 1967
Stop - Go (p. 56)		
Trains (p. 69)		
Read-Together Poems	Brown, H. A., & Heltman, J. J. (Eds.)	Harper & Row Publishers, 1961
Engine (p. 148)		
Funny the Way Different Cars Start (p. 147)		
Stop - Go (p. 148)		
Rhymes for Fingers and Flannelboards	Scott, L. B., & Thompson, J. J. (Eds.)	Webster Publishing Co., 1960
Here Is the Engine (p. 20)		
Railroad Train (p. 20)		

CHARTS AND STUDY PRINTS	SOURCE
Advertisement material from car, truck, and boat dealers; airlines; bus companies	
Bulletin Board Aids	Dennison
Traffic Safety (No. 81-150)	
Transportation (No. 81-145)	
City Picture	Field Enterprises Educational Corp., 1965

CHARTS AND STUDY PRINTS	SOURCE
Giant Everyday Pictures	Instructo Corp.
In the City (No. 1151)	
Language - Kit A	Ginn & Co.
Picture Cards: The School Patrol (Unit 2)	
The Service Station (Unit 3)	
Magazine pictures	
Peabody Language Development Kit Level #1 - Stimulus Cards	American Guidance, Inc.
People Cards	
Transportation Cards	
Teaching Pictures	David C. Cook Publishing Co.
Safety (No. A867)	
Transportation (No. A1559)	

FLANNEL BOARD SETS	SOURCE
Instructo Flannel Board Aids	Instructo Corp.
Air Transportation (No. 145)	
Cars and Trucks (No. 142)	

FLANNEL BOARD SETS	SOURCE
Instructo Flannel Board Aids (cont.)	Instructo Corp.
Safety on Streets and Sidewalks (No. 133)	
Trains (No. 143)	
Water Transportation (No. 144)	

ACTIVITY KITS AND INSTRUCTIONAL GAMES	SOURCE
Dominoes (No. 209)	Halsam Products Co.
Ed-U-Cards Lotto Games	Ed-U-Cards Mfg. Co.
Go-Together Lotto (No. 121)	
Woodboard Match Ups	Playskool, Milton Bradley Co.
People and Their Jobs (No. 7002)	

PUZZLES AND SEQUENCE BOARDS	SOURCE
Creative Playthings See-Inside Puzzles	Creative Playthings, Inc.
Airport (No. T271, 13 pcs.) (No. T471, 30 pcs.)	
Boats on River (No T274, 16 pcs.) (No. 474, 33 pcs.)	
Firehouse (No. T270, 15 pcs.) (No. T470, 27 pcs.)	

PUZZLES AND SEQUENCE BOARDS	SOURCE
Creative Playthings See-Inside Puzzles (cont.)	Creative Playthings, Inc.
Post Office (No. T275, 12 pcs.) (No. T475, 29 pcs.)	
Shopping Center (No. T278, 15 pcs.) (No. T478, 22 pcs.)	
Trains (No. T267, 11 pcs.) (No. T467, 24 pcs.)	
Trucks (No. T269, 10 pcs.) (No. T469, 22 pcs.)	
Judy Puzzles	The Judy Co.
Airplane (No. 1, 14 pcs.)	
Bus (No. 51, 18 pcs.)	
Car (No. 50, 13 pcs.)	
Delivery Truck (No. 66, 14 pcs.)	
Fire Engine (No. 64, 12 pcs.)	
Helicopter (No. 92, 9 pcs.)	
Milkman (No. 56, 8 pcs.)	
Newsboy (No. 88, 11 pcs.)	
Pickup Truck (No. 28, 13 pcs.)	
Postman (No. 55, 11 pcs.)	

PUZZLES AND SEQUENCE BOARDS	SOURCE
Judy Puzzles (cont.)	The Judy Co.
Tractor (No. 63, 11 pcs.)	
Train (No. 4, 20 pcs.)	
Tugboat (No. 2, 16 pcs.)	
Judy See-Quees	The Judy Co.
Bus Trip (No. Q71, 6 frames)	
Trip to the Zoo (No. Q6, 12 frames)	
Playskool Puzzles	Playskool, Milton Bradley Co.
Airplane (No. 330-16, 15 pcs.)	
Family Drive (No. 330-34, 14 pcs.)	
Firetruck (No. 360-26, 15 pcs.)	
Garage (No. 360-10, 27 pcs.)	
Helicopter (No. 330-27, 10 pcs.)	
Ice Cream Man (No. 360-23, 21 pcs.)	
Locomotive (No. 275-34, 12 pcs.)	
Police Car (No. 360-21, 18 pcs.)	
School Bus (No. 330-18, 15 pcs.)	
Streamliner Train (No. 360-25, 20 pcs.)	
Truck (No. 360-19, 18 pcs.)	

PUZZLES AND SEQUENCE BOARDS	SOURCE
Sifo Puzzles	Sifo Co.
Bus (No. 12A, 27 pcs.)	
Train (No. 4A0, 25 pcs.)	
Truck (No. 6A0, 18 pcs.)	
Trucks (Set of 4, No. 2Z8, 28-36 pcs.)	
Straus Sr. Activity Puzzles	Creative Playthings, Inc.
Jet Airport (No. T042, 30 pcs.)	
Railroad Station (No. T045, 30 pcs.)	

CONSTRUCTION MATERIALS	SOURCE
American Plastic Bricks (No. 730)	Playskool, Milton Bradley Co.
Kindergarten Blocks (Nos. 610, 615, 620)	Playskool, Milton Bradley Co.
Kinder School Blocks (Nos. 164-167)	Sifo Co.
Playskool Village (No. 310)	Playskool, Milton Bradley Co.
Skaneateles Trains and Blocks (Nos. S900, S910, S930, S950)	Playskool, Milton Bradley Co.

MODELS AND DRAMATIC ACTIVITY MATERIALS	SOURCE
Dress-up clothes, including hats for policeman, postman, milkman, engineer, pilot, bus driver	
Plastic or wooden model vehicles--cars, trucks, boats, airplanes, trains	
Traffic Signs (No. 586)	Playskool, Milton Bradley Co.
Tricycles, scooters, scat cars	

DEMONSTRATION MATERIALS AND EQUIPMENT		SOURCE
Activities		
B-1	Model cars	
B-3	Chalkboard or large area for a race track, model cars	
B-7	Tricycles, and other play vehicles	
C-6	Corrugated boxes, tissue rolls, model vehicles	
D-1	Model buses	
E-1	Film projector, model train	
E-3	Boxes for making a train	
F-4	Model airplanes	
G-1	Model boats, tub of water	
G-4	Tub of water, bottle corks, toothpicks	

DEMONSTRATION MATERIALS AND EQUIPMENT		SOURCE
Activities		
G-5	Film projector	
H-1	Models of vehicles, flannel board or chalkboard	
I-2	Props for role play	
I-3	Film projector, pamphlets and/or film on air pollution	
J-1	Model vehicles	
J-5	Tape recorder	
J-7	Wagon or wheelbarrow, blocks	
J-9	Precut pieces of wood, hammer, nails	

TEACHER-MADE MATERIALS		SOURCE
Activities		
A-3	Transportation wall display or bulletin board	(See Appendix)
B-3	Initial consonant cards	
B-6	Word cards	
B-7	Initial consonant cards	
C-1	Word cards	
F-2	Word cards	

TEACHER-MADE MATERIALS		SOURCE
Activities		
G-2	Boat puzzles	
J-5	Tape of vehicle sounds	

PUBLISHERS

Abelard-Schuman, Ltd.
62 West 45th Street
New York, New York 10003

Abingdon Press
201 8th Avenue South
Nashville, Tennessee 37203

American Book Company
450 West 33rd Street
New York, New York 10001

American Guidance Service, Inc.
Publisher's Building
Circle Pines, Minnesota 55014

Atheneum Publishers
122 E. 42nd Street
New York, New York 10017

Beginner Books, Inc.
Educational Department
Random House School &
Library Service, Inc.
(See: Random House, Inc.)

Benefic Press
1900 Narragansett
Chicago, Illinois 60639

Big Golden
(See: Western Publishing Co.)

Chandler Publishing Company
124 Spear Street
San Francisco, California 94105

Children's Press, Inc.
1224 West Van Buren Street
Chicago, Illinois 60607

Coward-McCann, Inc.
200 Madison Avenue
New York, New York 10016

Thomas Y. Crowell Company
201 Park Avenue South
New York, New York 10003

John Day Company
62 S. 45th Street
New York, New York 10036

Doubleday and Company, Inc.
511 Franklin Avenue
Garden City, New York 11530

E. P. Dutton & Company, Inc.
201 Park Avenue South
New York, New York 10003

Educational Reading Service
East 64 Midland Avenue
Paramus, New Jersey 07652

Encyclopedia Britannica, Inc.
425 North Michigan Avenue
Chicago, Illinois 60611

Field Enterprises
Educational Corporation
510 Merchandise Mart Plaza
Chicago, Illinois 60654

Follett Publishing Company
201 North Wells Street
Chicago, Illinois 60606

Ginn & Company
Statler Building
Back Bay P. O. Box 191
Boston, Massachusetts 02117

Golden Press, Inc.
(See: Western Publishing Co., Inc.)

Golden Records
250 West 57th Street
New York, New York 10019

Grosset & Dunlap, Inc.
51 Madison Avenue
New York, New York 10010

E. M. Hale and Company
1210 South Hastings Way
Eau Claire, Wisconsin 54701

Harcourt, Brace & World, Inc.
757 3rd Avenue
New York, New York 10017

Harper & Row Publishers
49 East 33rd Street
New York, New York 10016

Hastings House Publisher, Inc.
10 East 40th Street
New York, New York 10016

Hayes School Publishing Company
321 Pennwood Avenue
Wilkinsburg, Pennsylvania 15221

Houghton Mifflin Company
2 Park Street
Boston, Massachusetts 02107

Alfred A. Knopf, Inc.
(See: Random House)

J. B. Lippincott Company
East Washington Square
Philadelphia, Pennsylvania 19105

Lothrop, Lee & Shepard Co., Inc.
381 Park Avenue South
New York, New York 10016

The MacMillan Company
866 Third Avenue
New York, New York 10022

Edward B. Marks Music Corp.
136 West 52nd Street
New York, New York 10019

McGraw-Hill Company, Inc.
Princeton Road
Highstown, New Jersey 08520

Melmont Publishers, Inc.
Jackson Boulevard &
Racine Avenue
Chicago, Illinois 60607

Charles E. Merrill Publishing Co.
1300 Alum Creek Drive
Columbus, Ohio 43216

William Morrow & Company
105 Madison Avenue
New York, New York 10017

Parents' Magazine Press
52 Vanderbilt Avenue
New York, New York 10017

Platt & Munk
Division of Child
Guidance Products, Inc.
1055 Bronx River Avenue
Bronx, New York 10472

G. P. Putnam's Sons
200 Madison Avenue
New York, New York 10016

Rand McNally & Company
Box 7600
Chicago, Illinois 60680

Random House, Inc.
201 East 50th Street
New York, New York 10022

Scholastic Book Services
50 West 44th Street
New York, New York 10036

Scott, Foresman and Company
1900 East Lake Avenue
Glenview, Illinois 60025

William R. Scott, Inc.
333 Avenue of Americas
New York, New York 10014

Science Research Associates, Inc.
259 East Erie Street
Chicago, Illinois

Charles Scribner's Sons
597 Fifth Avenue
New York, New York 10017

Silver Burdett Publishing Company
250 James Street
Morristown, New Jersey 07960

Simon & Schuster, Inc.
630 Fifth Avenue
New York, New York 10020

Summy-Birchard Company
1834 Ridge Avenue
Evanston, Illinois 60204

Taylor Publishing Company
Box 597
Dallas, Texas 75221

The Viking Press
625 Madison Avenue
New York, New York 10022

PUBLISHERS

Henry Z. Walck, Inc.
17-19 Union Square
New York, New York 10003

Franklin Watts, Inc.
575 Lexington Avenue
New York, New York 10022

Webster Division of McGraw-Hill
(Formerly Webster
Publishing Co.)
Manchester Road
Manchester, Missouri 63011

Western Publishing Company, Inc.
850 Third Avenue
New York, New York 10022

Albert Whitman & Company
560 West Lake Street
Chicago, Illinois 60606

Whittesey House
(See: McGraw-Hill)

Wonder Books, Inc.
(See: Grosset & Dunlap, Inc.)

Young Scott Books
(See: William R. Scott, Inc.)

RECORDS AND FILMS

Bowmar Records
10515 Burbank Boulevard
North Hollywood, Calif. 91601

Capital Publishers Co., Inc.
Box 235
Washington, D. C. 20015

Concept Records
P. O. Box 524F
North Bellmore, Long Island
New York 11710

Cornell University Records
124 Roberts Place
Ithaca, New York 14850

Coronet Films
Coronet Building
Chicago, Illinois 60601

MANUFACTURING COMPANIES FOR INSTRUCTIONAL MATERIALS

Milton Bradley Company
Springfield, Mass. 01101

The Continental Press, Inc.
Elizabethtown, Pa. 17022

David C. Cook Publishing Co.
850 North Grove Avenue
Elgin, Illinois 60120

Creative Playthings
Princeton, New Jersey 08540

T. S. Dennison & Company, Inc.
5100 West 82nd Street
Minneapolis, Minnesota

Educational Teaching Aids Division
159 West Kinzie Street
Chicago, Illinois 60610

General Learning Corporation
3 East 54th Street
New York, New York 10022

Grade Teacher
23 Leroy Avenue
Darien, Connecticut 06820

The Judy Company
310 North Second Street
Minneapolis, Minnesota 55401

Instructo Corporation
Paoli, Pennsylvania 19301

National Dairy Council
111 North Canal Street
Chicago, Illinois 60606

Playskool (Research)
3720 North Redzie Avenue
Chicago, Illinois

Society for Visual Education, Inc.
1345 Diversey Parkway
Chicago, Illinois 60614

Teaching Resources, Inc.
100 Boylston Street
Boston, Massachusetts 02116

VI. Appendix

The drawings on the following pages are suggested aids in developing the concepts, understandings, and skills related to this unit. They may be used in a variety of ways.

The Transportation Scene

The first drawing is a transportation scene which could be helpful in making your bulletin board or wall display. Just as the concepts, activities, and skills are sequenced from the concrete to the abstract, the bulletin board can be sequenced.

First put up the background: land, air, and water, roads and railroad tracks. Have the children verbalize about what they see. As you introduce each new means of transportation, add it to the scene.

This bulletin board can be adapted to your locale and used in many ways throughout the unit. Some of these are:

a) for helping your group recall the vehicles they have studied,

b) for shape and color recognition and identification, especially shades,

c) for What's Missing games,

d) for description and guessing games,

e) for size comparisons,

f) for reviewing and developing position concepts,

g) for developing Motor Response Skills if you involve the children in making parts of the bulletin board.

The Patterns

Patterns for some of the means of transportation covered in this unit can also be helpful to you. Some of the ways these patterns can be used are:

a) in making your bulletin board--they can be traced or copied onto construction paper,

b) for whole-part-whole pasting activities,

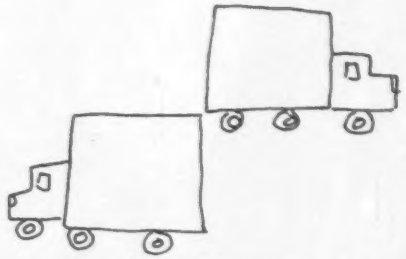
c) for tracing or copying onto stencils and making dittoes for coloring,

d) for tracing onto felt material to make cut-outs for your flannel board.

Helpful Hints in Making Your Bulletin Board

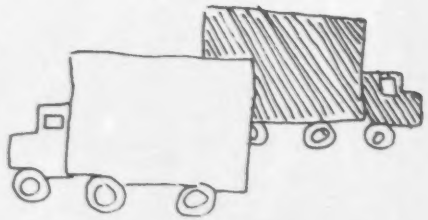
1. Use simple shapes.
2. Keep the scene fairly simple and uncrowded.
3. Cut or tear green paper to represent grass. Use different shades of green for bushes and leaves.
4. Use two different shades of blue for sky and water.
5. The following techniques can be used to give perspective.

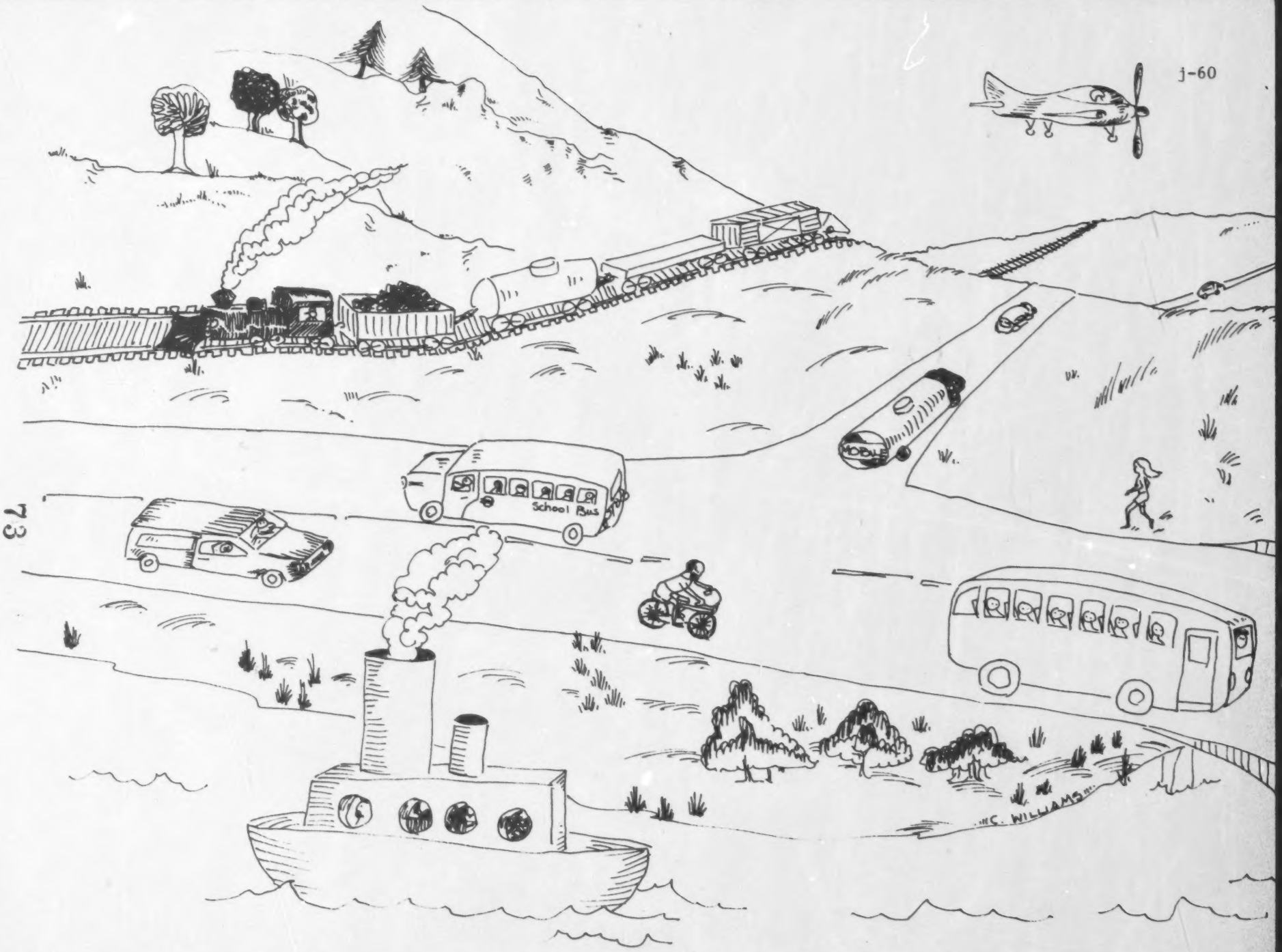
a) Put one thing diagonally above the other.



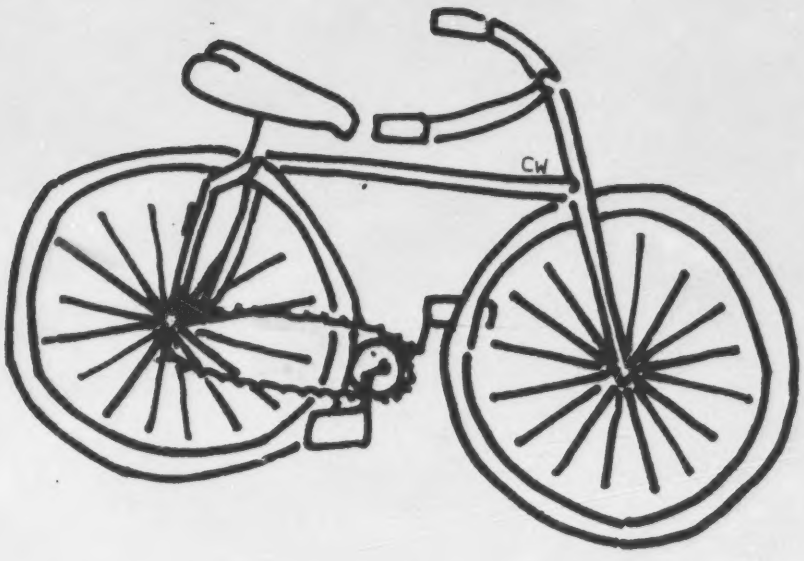
b) Make one thing smaller than and next to the other.

c) Overlap, using two shades with the darker one in the back and the lighter one in front.




MOBILE
School Bus
C. WILLIAMS

BICYCLE



SMALL CAR

LARGE CAR

DUMP TRUCK

SCHOOL BUS

CITY BUS

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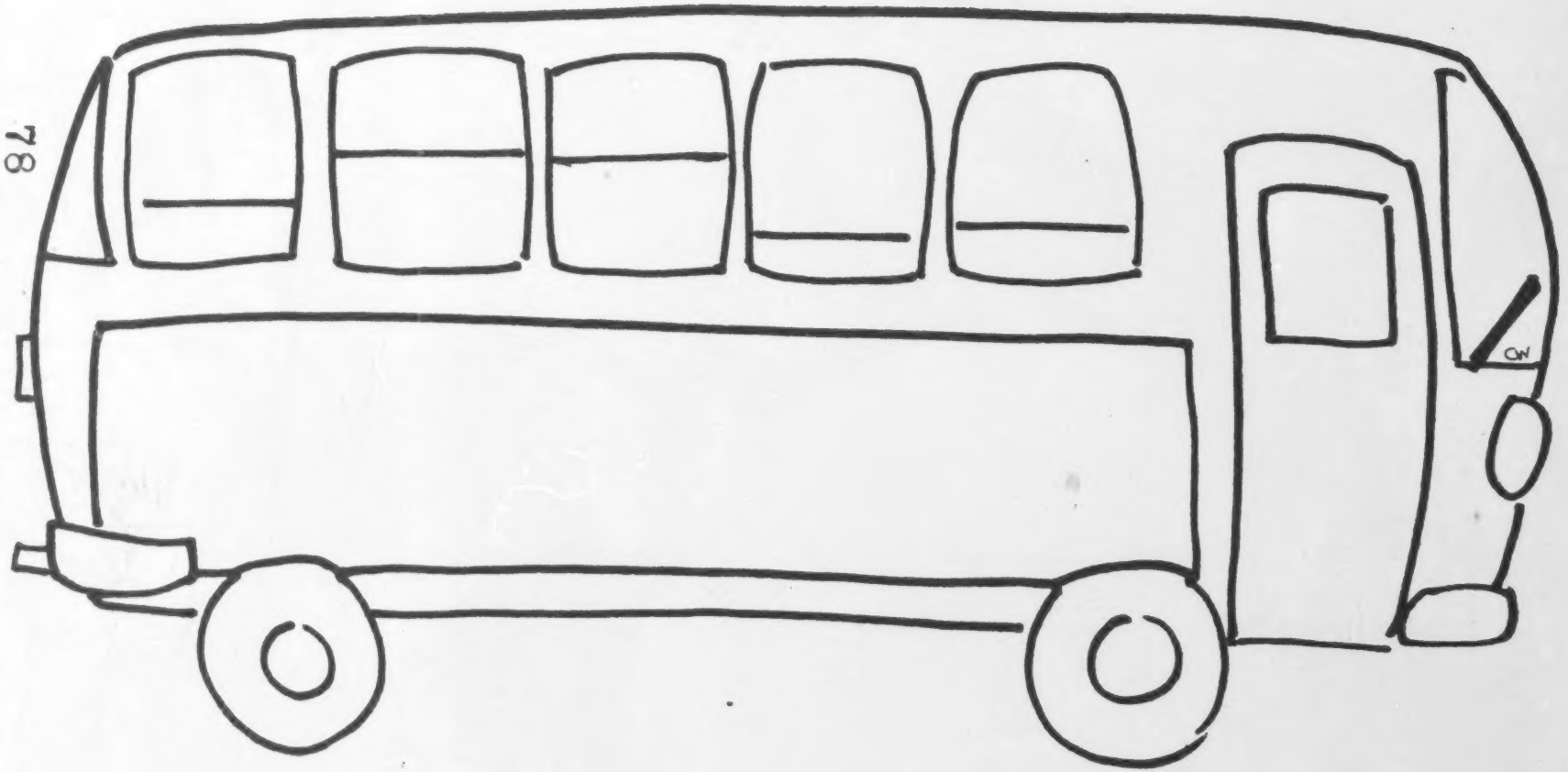
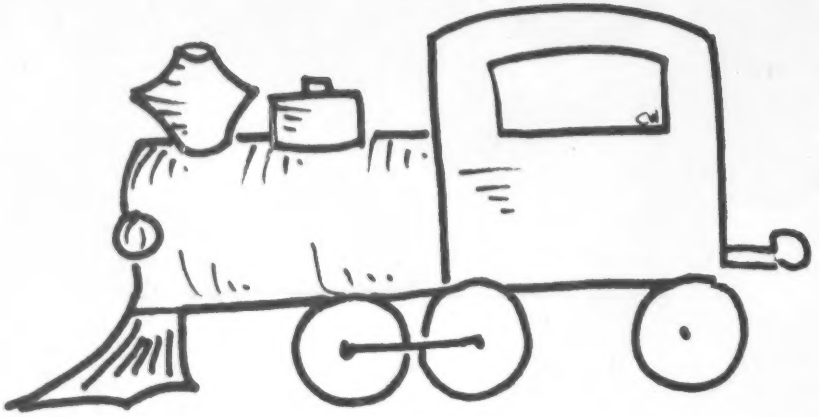
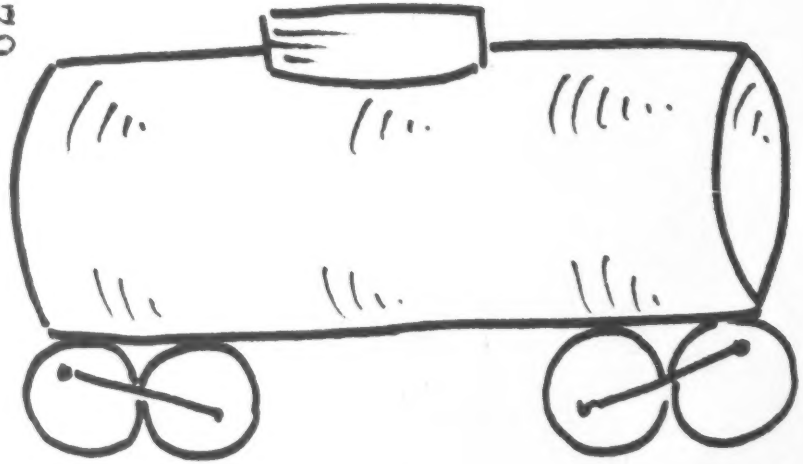


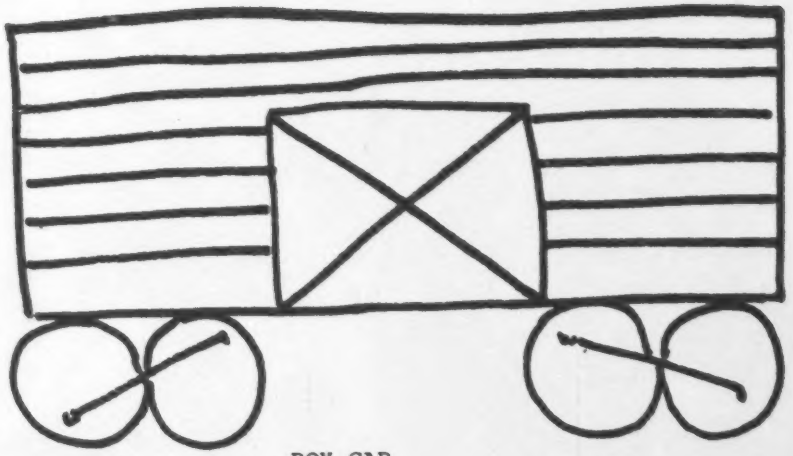


ENGINE

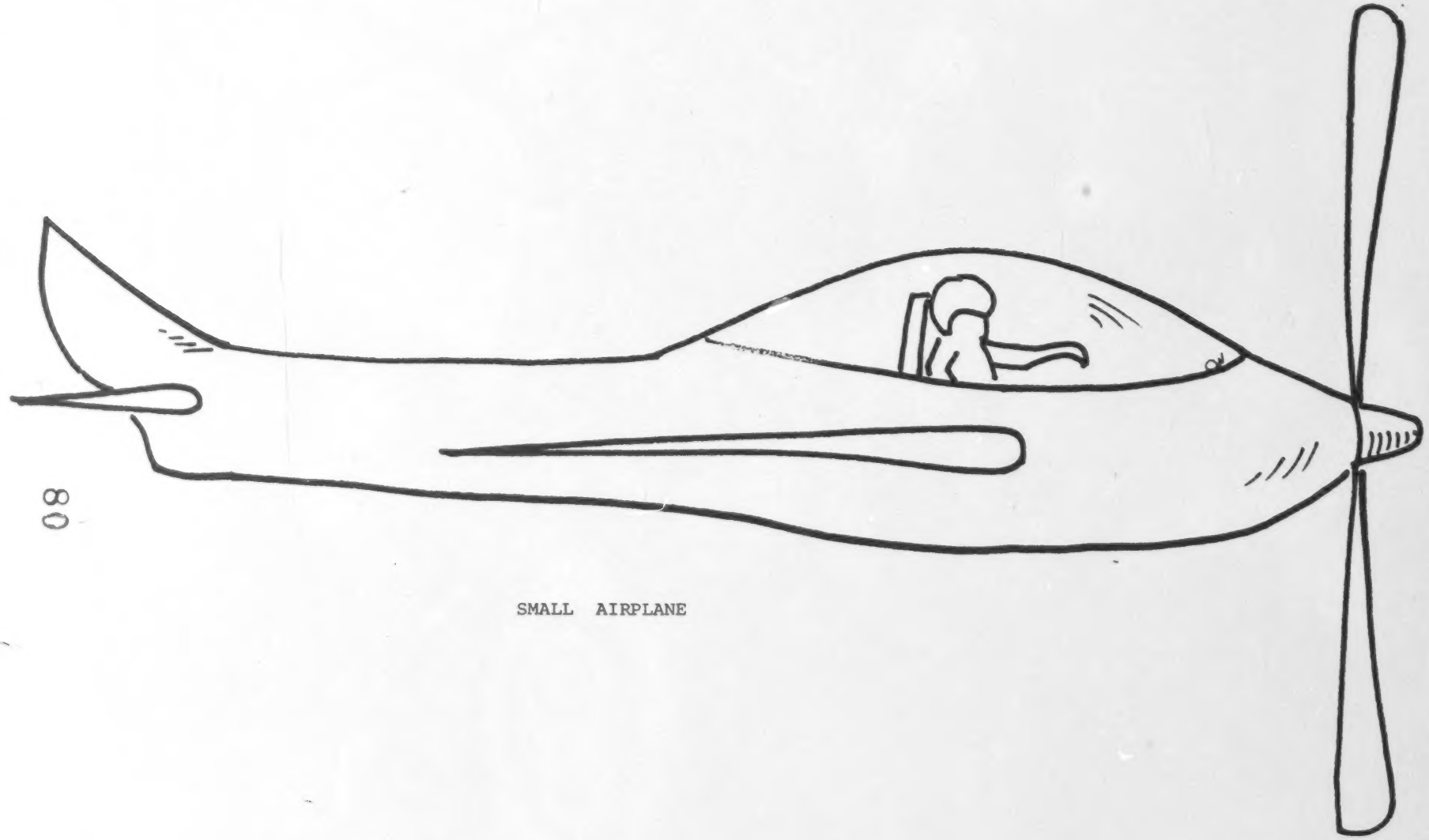
FLAT CAR



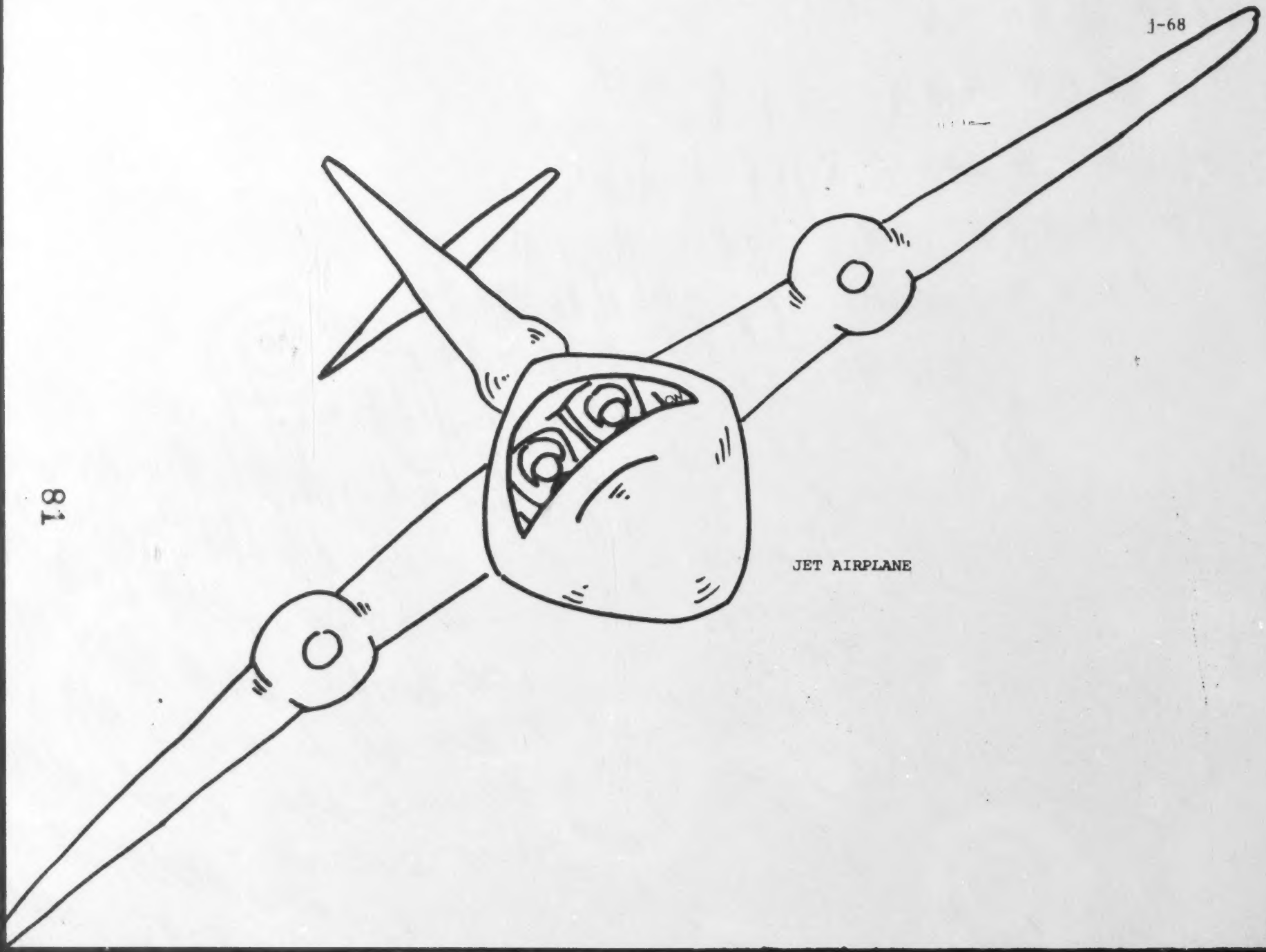
TANK CAR



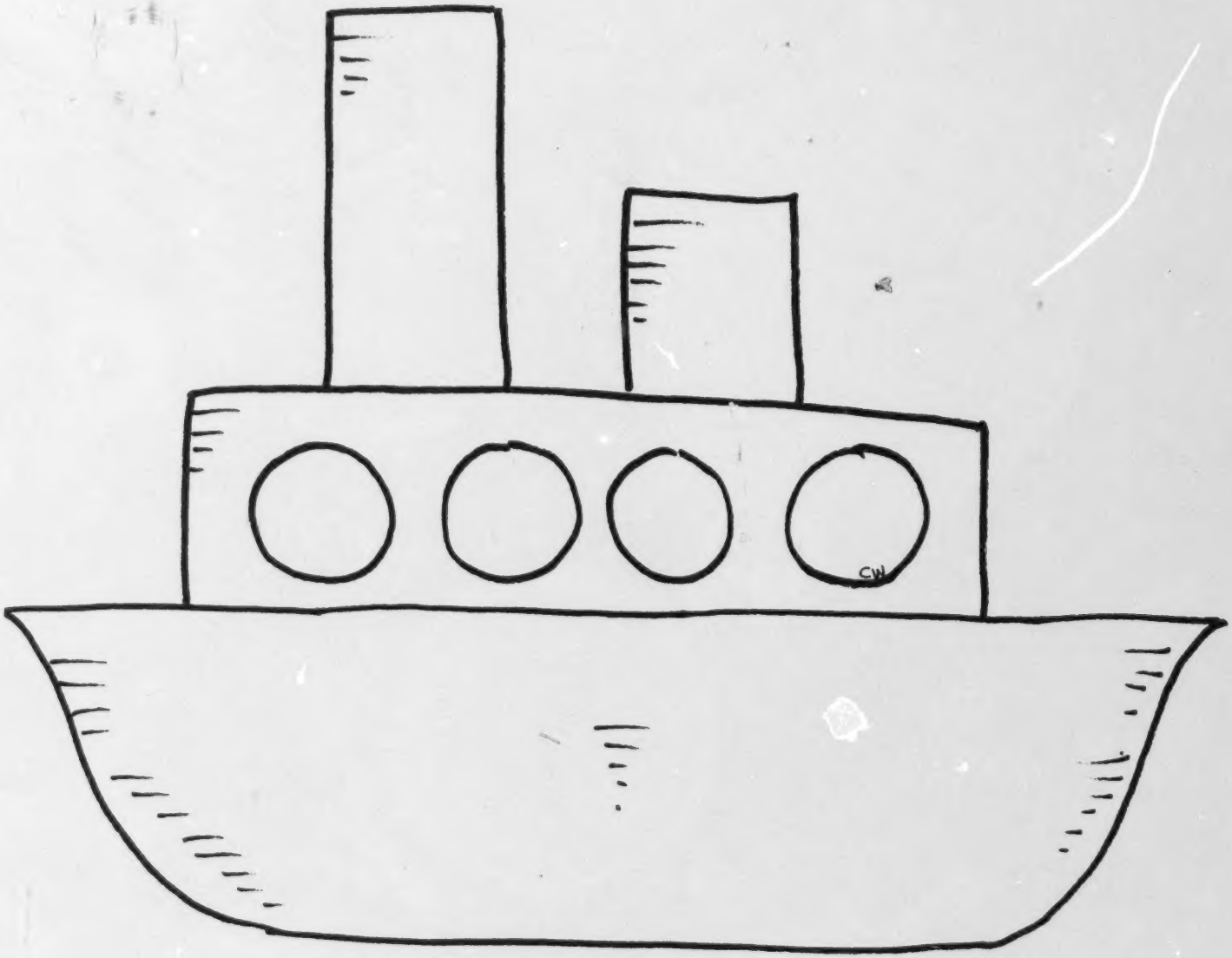
BOX CAR



SMALL AIRPLANE



JET AIRPLANE



TUG BOAT

SAIL BOAT